

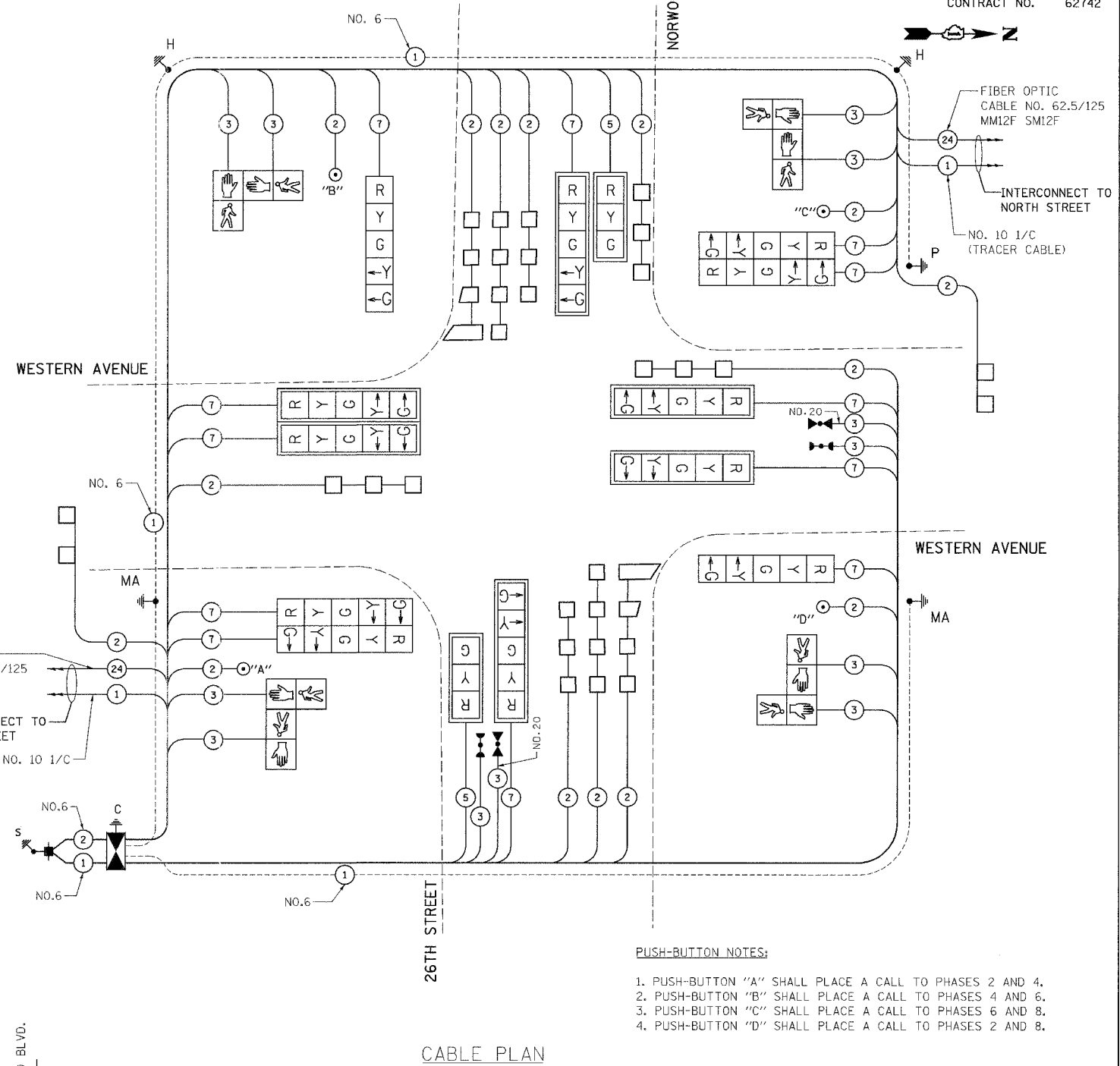
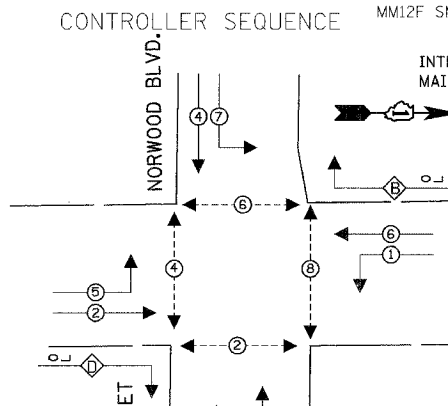
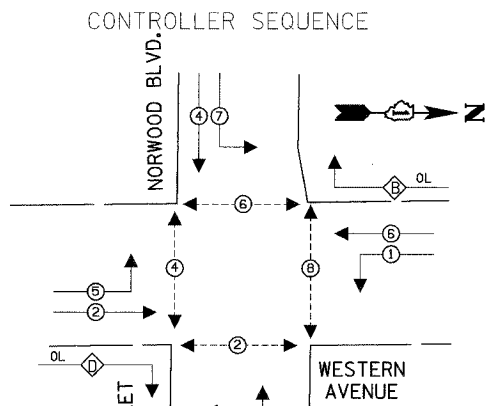
CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSH-BUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (C), OR CONTROLLER (C)
[Symbol]	[Symbol]	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
RELOCATE SIGN PANEL, TYPE 1	SQ FT	45
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	308
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	83
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	117
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	306
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	493
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	842
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2004
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	666
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2618
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1863
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	62
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	22
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	1102
RELOCATE LIGHT DETECTOR	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7743
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	1088
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	301
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	101
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	



- PUSH-BUTTON NOTES:
1. PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 4.
 2. PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 AND 6.
 3. PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.
 4. PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8.

NOTE:
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION		
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	14	135	25	0.25	87.5
(GREEN)	14	135	15	0.25	17.5
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	552.8
VILLAGE OF PARK FOREST 330 VICTORY DRIVE PARK FOREST, ILLINOIS 60466					
CONTACT: Jlm Werner					
PHONE: (708) 235-2694					
COMPANY: Commonwealth Edison					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

PROPOSED EMERGENCY VEHICLE PREEMPTOR	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CABLE PLAN,
 PHASE DESIGNATION DIAGRAM,
 SCHEDULE OF QUANTITIES
 WESTERN AVE AT NORWOOD BLVD/26TH ST
 SCALE: VERT. NONE
 HORIZ. 1"=20'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PREPARED BY:
CEMCON, L.A.
 Consulting Engineers, Land Surveyors & Planners
 2880 White Oak Circle, Suite 100
 Aurora, IL 60504-5673
 Phone: 630-582-7000 Fax: 630-582-2199
 E-Mail: info@cemcon.com Web: www.cemcon.com



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	102
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
		CONTRACT NO.		62742

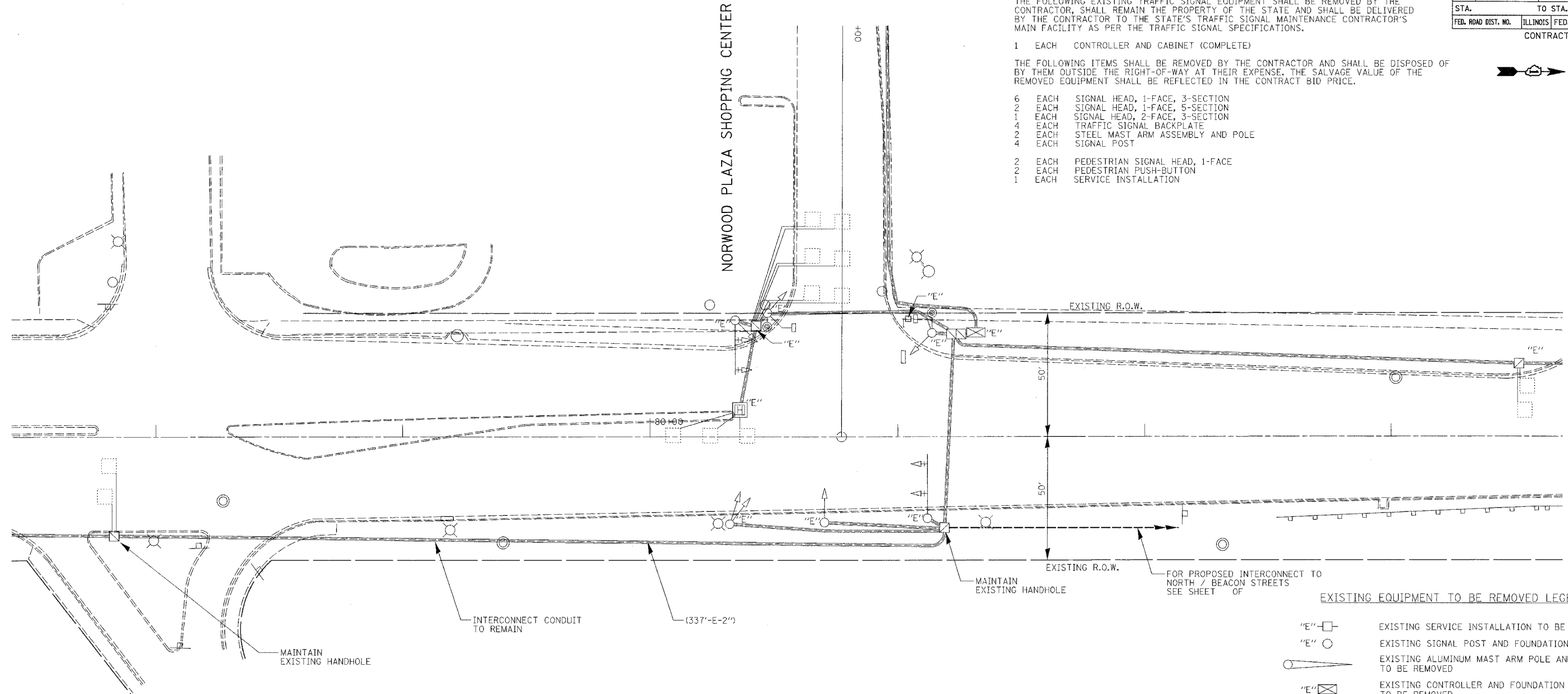
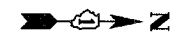
REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 4 EACH SIGNAL POST
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 1 EACH SERVICE INSTALLATION



EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" □ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ◀ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" □ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊞ EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- ◀ EXISTING PRIORITY VEHICLE DETECTOR TO BE REMOVED
- EXISTING CONFIRMATION BEACON TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- + Δ EXISTING TRAFFIC SIGNAL HEAD WITH BACKPLATE TO BE REMOVED
- Δ EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED

WESTERN AVENUE

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2378
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7

MAINTAIN EXISTING INTERCONNECT CONDUIT AND HANDHOLES ALONG WESTERN AVENUE BETWEEN NORTH STREET / BEACON BLVD TO ILLINOIS STREET / 16TH STREET. SEE PROPOSED INTERCONNECT PLANS ON SHEETS TO .

RESTORATION OF WORK AREA
 RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL REMOVAL PLAN
WESTERN AVENUE AT
NORWOOD PLAZA SHOPPING CENTER
 SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

PLOT DATE = 5/18/2007
 PLOT SCALE = 1"=20'
 USER NAME = JLA

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2800 White Oak Circle, Suite 100
 Aurora, IL 60018
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 E-Mail: info@cemcon.com Website: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	103
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 62742		

REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

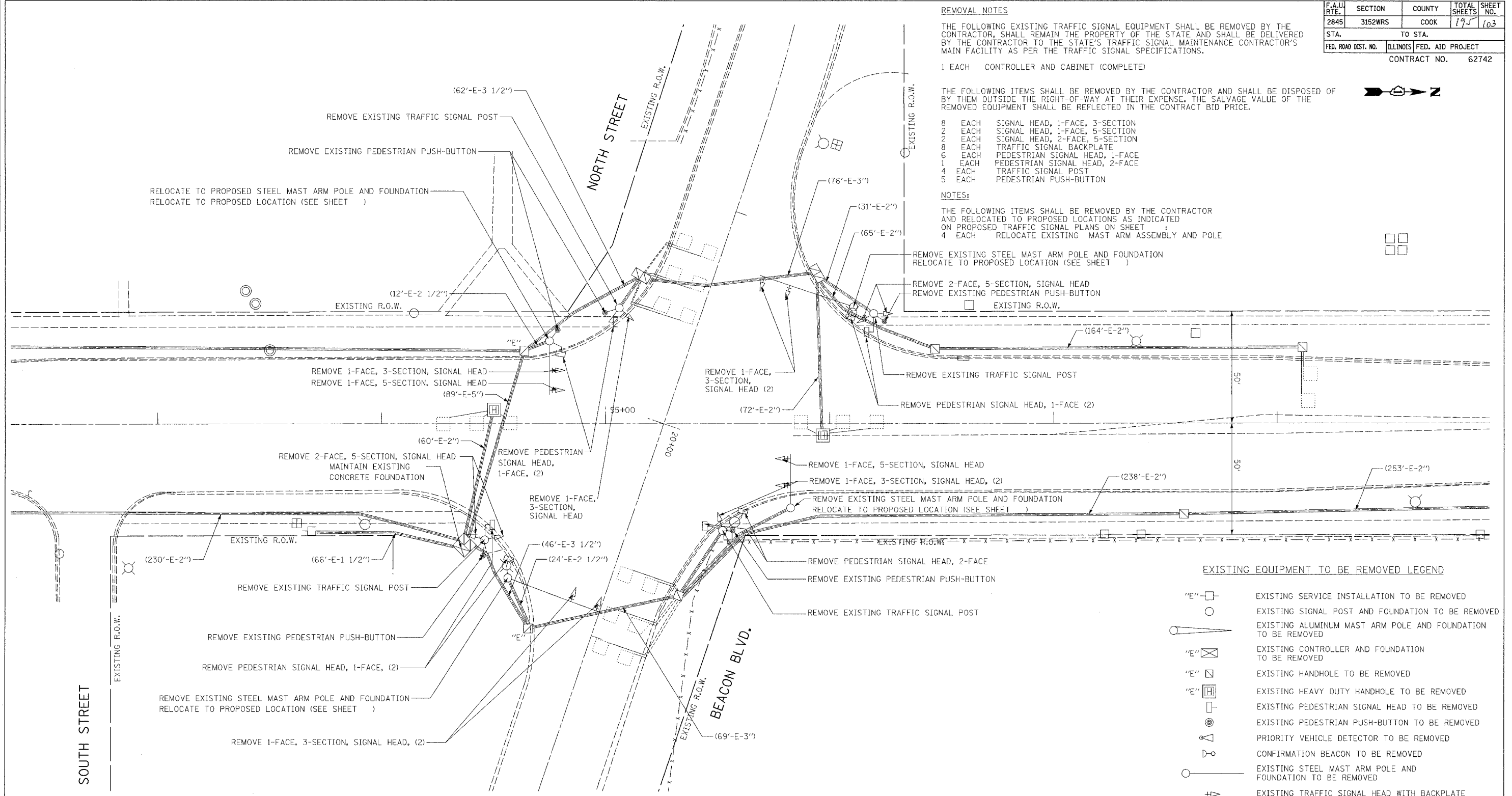
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE, THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 5-SECTION
- 8 EACH TRAFFIC SIGNAL BACKPLATE
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH TRAFFIC SIGNAL POST
- 5 EACH PEDESTRIAN PUSH-BUTTON

NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO PROPOSED LOCATIONS AS INDICATED ON PROPOSED TRAFFIC SIGNAL PLANS ON SHEET :

- 4 EACH RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE



EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" □ EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊗ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊡ EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- ⊙ EXISTING PRIORITY VEHICLE DETECTOR TO BE REMOVED
- ⊙ EXISTING CONFIRMATION BEACON TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊙ EXISTING TRAFFIC SIGNAL HEAD WITH BACKPLATE TO BE REMOVED
- ⊙ EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED

RESTORATION OF WORK AREA, RESTORATION OF TRAFFIC SIGNAL
 WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

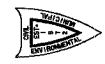
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL REMOVAL PLAN
WESTERN AVENUE AT
NORTH STREET/BEACON BLVD.
 SCALE: VERT. 1" = 20'
 HORIZ. 1" = 40'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

FOR UNDERGROUND UTILITY LOCATIONS, CALL
J.U.L.I.E.
 TOLL FREE
 TEL. 1-800-892-0123

PLOT DATE = 5/19/2007
 PLOT SCALE = 1" = 20'
 USER NAME = JLA

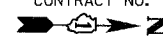
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2800 White Oak Circle, Suite 100
 Naperville, IL 60563
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NOTES FOR TEMPORARY TRAFFIC SIGNALS

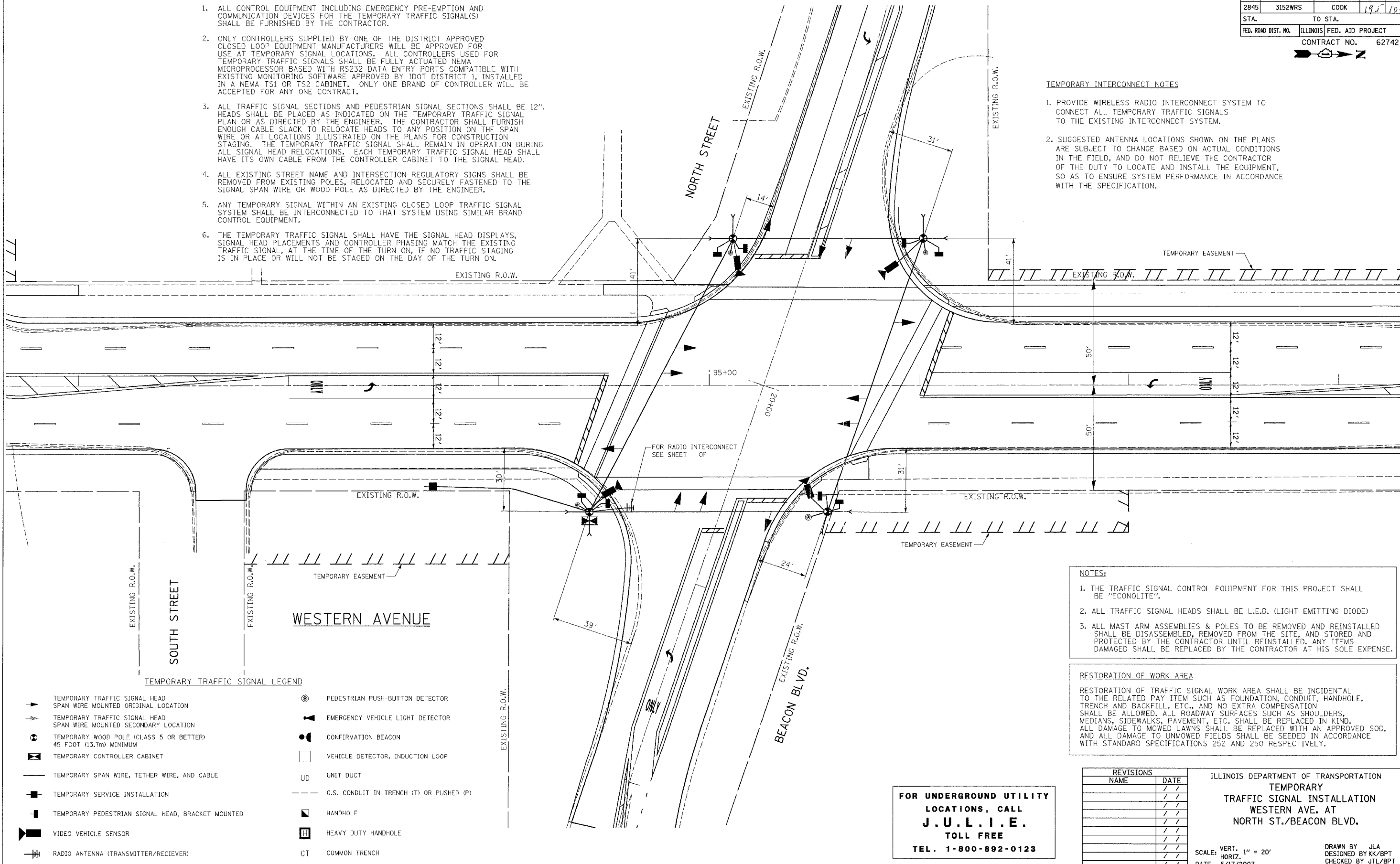
1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	19	104
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO.	62742	



TEMPORARY INTERCONNECT NOTES

1. PROVIDE WIRELESS RADIO INTERCONNECT SYSTEM TO CONNECT ALL TEMPORARY TRAFFIC SIGNALS TO THE EXISTING INTERCONNECT SYSTEM.
2. SUGGESTED ANTENNA LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS IN THE FIELD, AND DO NOT RELIEVE THE CONTRACTOR OF THE DUTY TO LOCATE AND INSTALL THE EQUIPMENT, SO AS TO ENSURE SYSTEM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATION.



- NOTES:**
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)
 3. ALL MAST ARM ASSEMBLIES & POLES TO BE REMOVED AND REINSTALLED SHALL BE DISASSEMBLED, REMOVED FROM THE SITE, AND STORED AND PROTECTED BY THE CONTRACTOR UNTIL REINSTALLED. ANY ITEMS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AT HIS SOLE EXPENSE.

RESTORATION OF WORK AREA

RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TEMPORARY TRAFFIC SIGNAL LEGEND

	TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION		PEDESTRIAN PUSH-BUTTON DETECTOR
	TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION		EMERGENCY VEHICLE LIGHT DETECTOR
	TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM		CONFIRMATION BEACON
	TEMPORARY CONTROLLER CABINET		VEHICLE DETECTOR, INDUCTION LOOP
	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE		UNIT DUCT
	TEMPORARY SERVICE INSTALLATION		G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
	TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED		HANDHOLE
	VIDEO VEHICLE SENSOR		HEAVY DUTY HANDHOLE
	RADIO ANTENNA (TRANSMITTER/RECIEVER)		COMMON TRENCH

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY TRAFFIC SIGNAL INSTALLATION
 WESTERN AVE. AT NORTH ST./BEACON BLVD.

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 5/17/2007

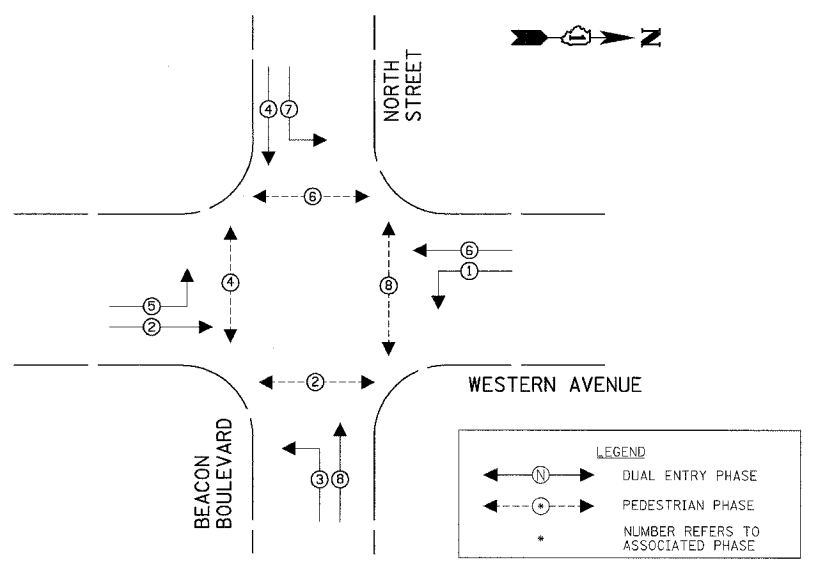
DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

DATE: 5/16/2007
 FILE NAME: I:\Projects\3152WRS\3152WRS.dgn
 PLOT SCALE: 1"=20'
 USER NAME: JLA

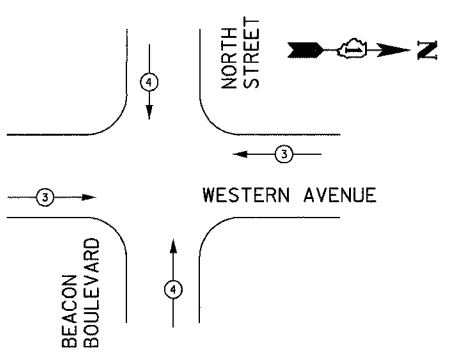
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2880 White Oak Circle, Suite 100
 Naperville, IL 60563
 Tel: 630-882-2100 Fax: 630-882-8199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	105
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO.	62742

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

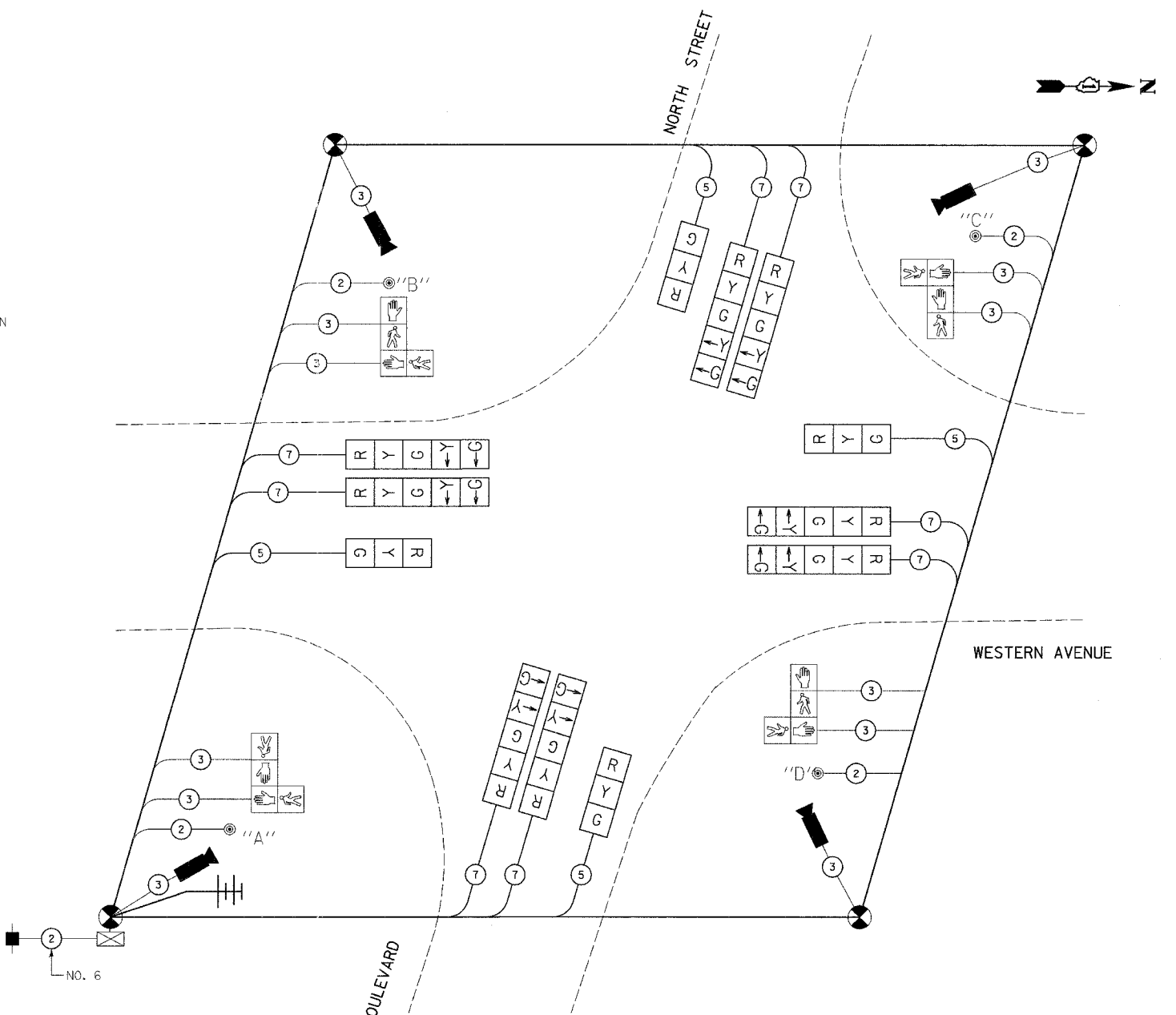


EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇐	⇐

EMERGENCY VEHICLE PREEMPTION SEQUENCE

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSH-BUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE SENSOR
- RADIO ANTENNA (TRANSMITTER/RECEIVER)
- TEMPORARY WOOD POLE



TEMPORARY CABLE PLAN

NOTES:

- PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 4.
- PUSH-BUTTON "B" SHALL PLACE A CALL TO PHASES 4 AND 6.
- PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.
- PUSH-BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8.

NOTES:

- CABLES FOR VIDEO DETECTORS AND RADIO ANTENNAS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURERS OF THE EQUIPMENT.
- THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 WESTERN AVE. AT NORTH ST./BEACON BLVD.
 SCALE: VERT. NONE
 HORIZ. DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

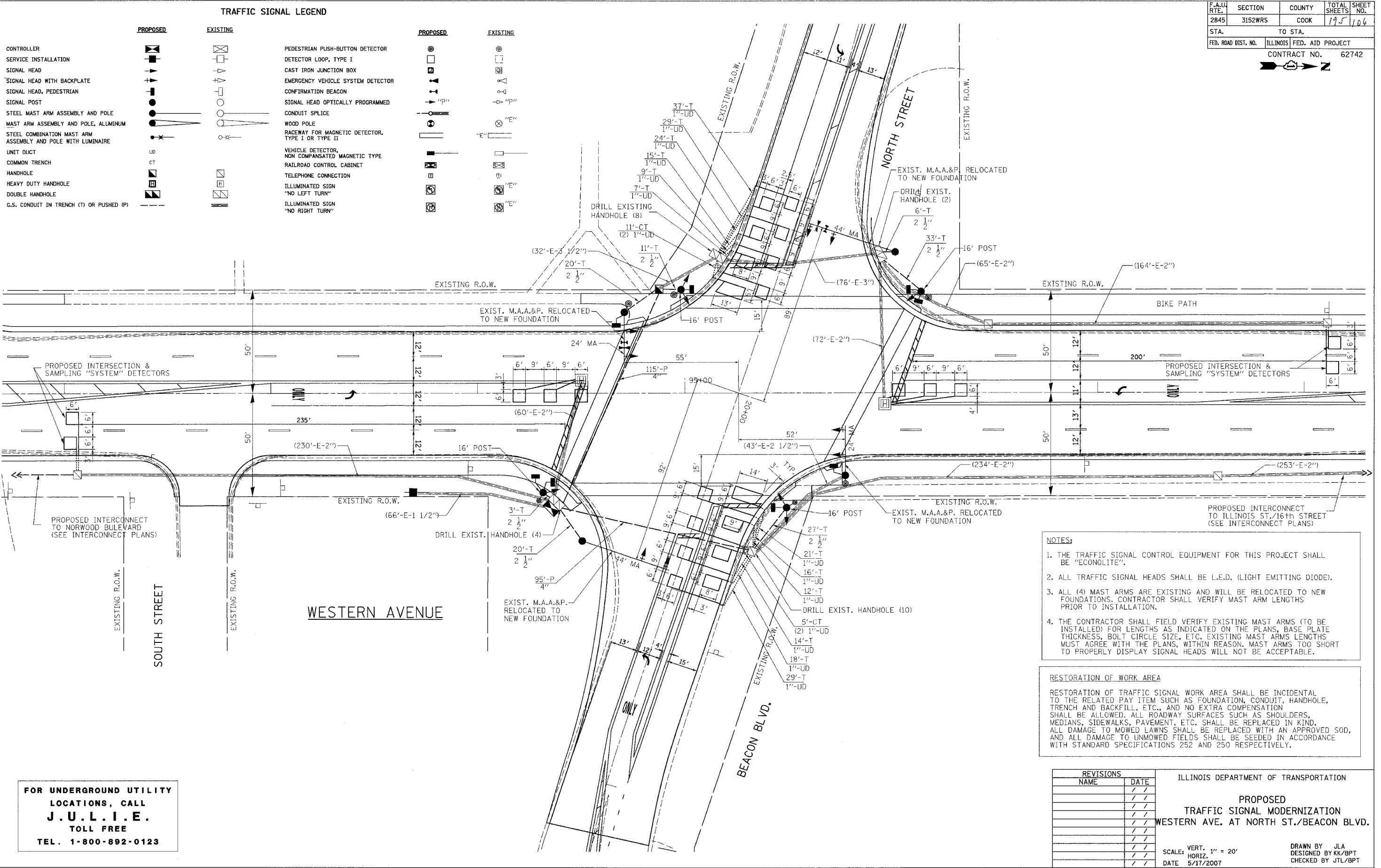
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 541.2
25% TO IDOT					
37.5% TO VILLAGE OF PARK FOREST					
37.5% TO CITY OF CHICAGO HEIGHTS					
ENERGY SUPPLY CONTACT: Jim Werner					
PHONE: (708) 235-2694					
COMPANY: Commonwealth Edison					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

PLOT DATE = 5/19/2007
 PLOT SCALE = 1"=20'
 USER NAME = JLA

PREPARED BY:
CEMCON, L4
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9575
 F. MOILL: 630.492.8188
 E-MAIL: cec@cemcon.com Website: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	106
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 62742	



- NOTES:**
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).
 3. ALL (4) MAST ARMS ARE EXISTING AND WILL BE RELOCATED TO NEW FOUNDATIONS. CONTRACTOR SHALL VERIFY MAST ARM LENGTHS PRIOR TO INSTALLATION.
 4. THE CONTRACTOR SHALL FIELD VERIFY EXISTING MAST ARMS (TO BE INSTALLED) FOR LENGTHS AS INDICATED ON THE PLANS, BASE PLATE THICKNESS, BOLT CIRCLE SIZE, ETC. EXISTING MAST ARMS LENGTHS MUST AGREE WITH THE PLANS, WITHIN REASON. MAST ARMS TOO SHORT TO PROPERLY DISPLAY SIGNAL HEADS WILL NOT BE ACCEPTABLE.

RESTORATION OF WORK AREA

RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL MODERNIZATION
 WESTERN AVE. AT NORTH ST./BEACON BLVD.

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 40'
 DATE 5/17/2007

DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

PLOT DATE = 5/18/2007
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 USER NAME = JLA

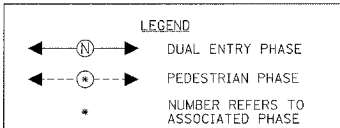
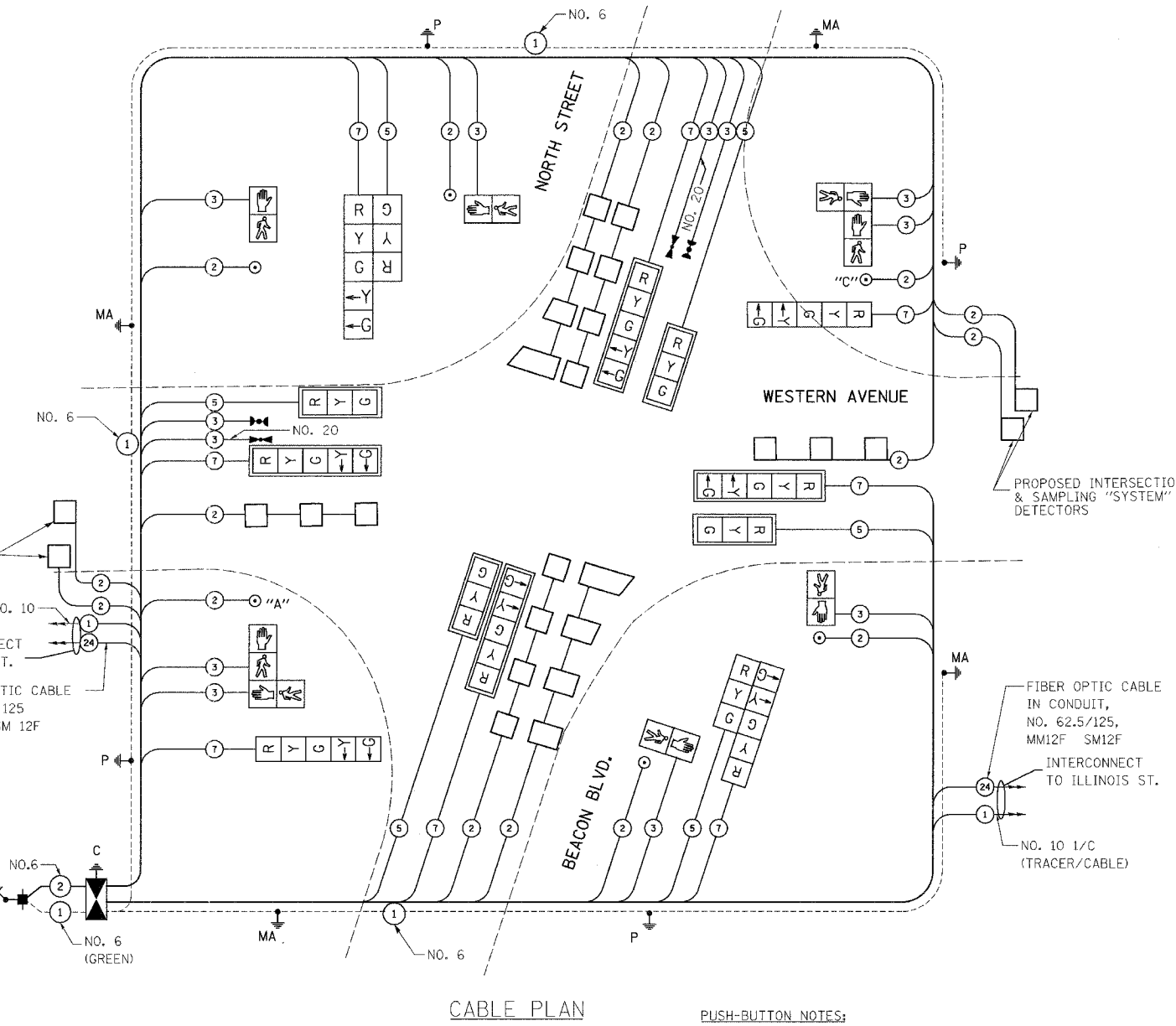
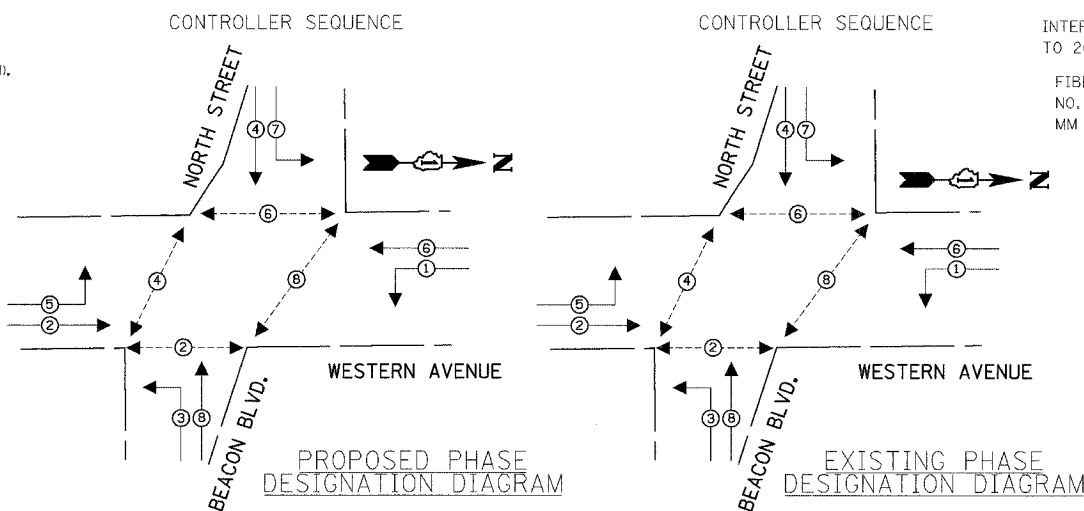
CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSH-BUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	① DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	① GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	② FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
[Symbol]	[Symbol]	SIGNAL FACE W/BACKPLATE, "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HD), OR CONTROLLER (C)
[Symbol]	[Symbol]	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SIGN PANEL, TYPE 1	SQ FT	48
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	120
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	210
HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	247
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1007
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1957
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	987
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1562
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2569
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	69
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	24
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	941
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	6
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE	EACH	4
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6391
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	585
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	539
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

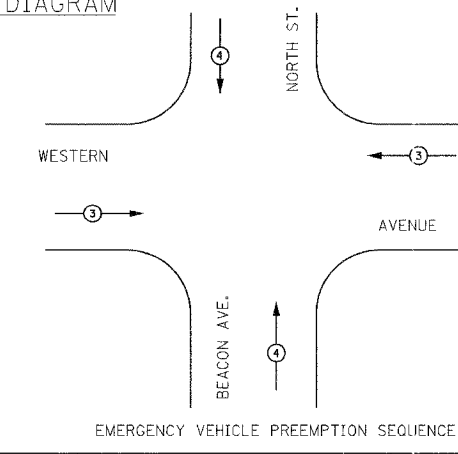
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	107
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO.			62742	



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	%OPERATION	
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
TOTAL =					541.2

ENERGY COSTS TO:
 VILLAGE OF PARK FOREST
 330 VICTORY DRIVE
 PARK FOREST, ILLINOIS 60466
 CONTACT: Jim Werner
 PHONE: (708) 235-2694
 COMPANY: Commonwealth Edison

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)



PROPOSED EMERGENCY VEHICLE PREEMPTOR	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	⇌ ⇕

REVISIONS	
NAME	DATE

PUSH-BUTTON NOTES:
 1. PUSH-BUTTON "A" SHALL PLACE A CALL TO PHASES 2 AND 4.
 2. PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.

NOTE:
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
 WESTERN AVE. AT NORTH ST./BEACON BLVD.
 SCALE: VERT. NONE
 HORIZ. 1"=20'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	108
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 62742		

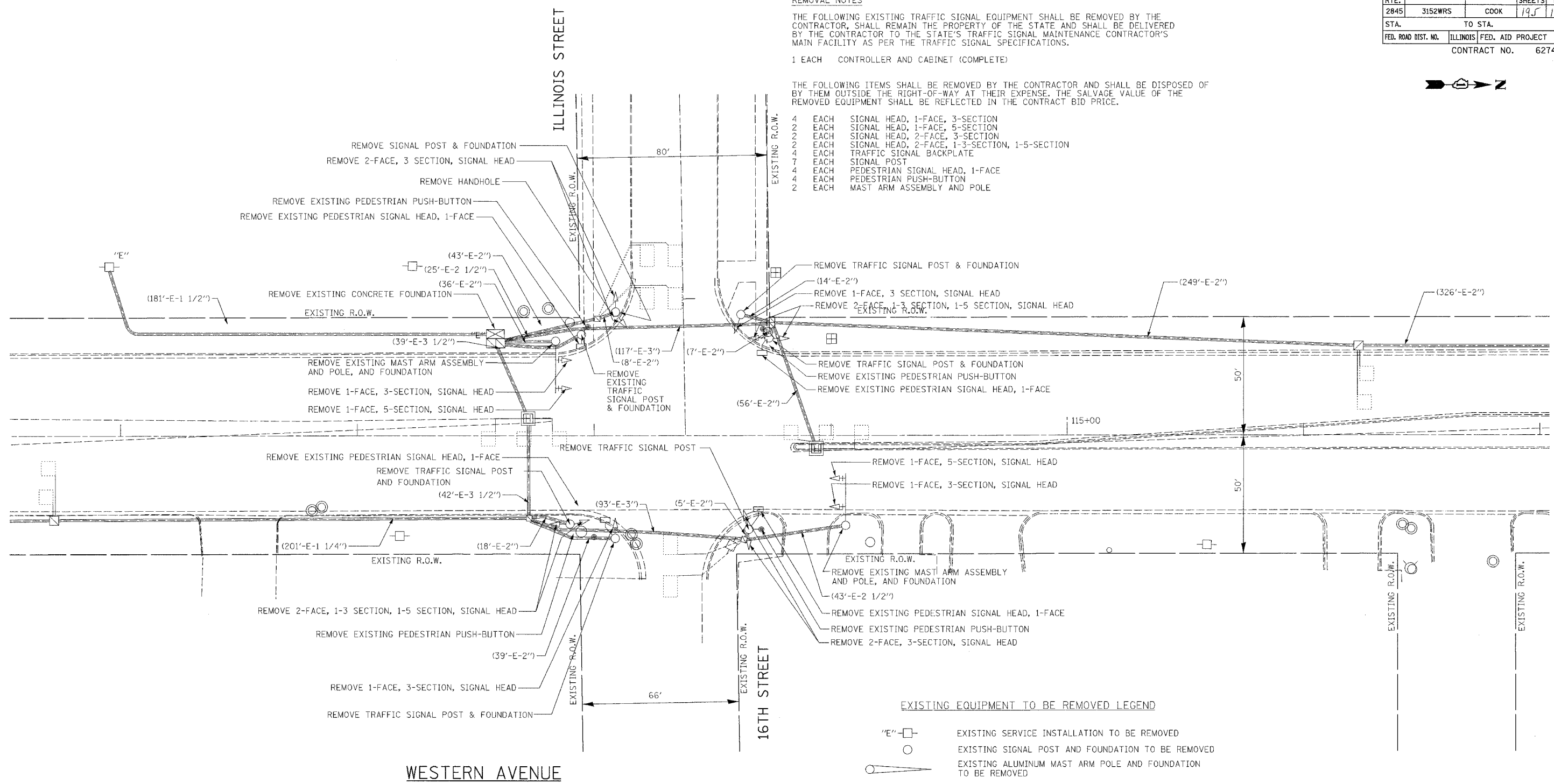
REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5-SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 7 EACH SIGNAL POST
- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH MAST ARM ASSEMBLY AND POLE



EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" □ EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊗ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" □ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊕ EXISTING HEAVY DUTY HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊗ EXISTING PEDESTRIAN PUSH-BUTTON TO BE REMOVED
- ⊙ EXISTING PRIORITY VEHICLE DETECTOR TO BE REMOVED
- EXISTING CONFIRMATION BEACON TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- ⊕ EXISTING TRAFFIC SIGNAL HEAD WITH BACKPLATE TO BE REMOVED
- ⊖ EXISTING TRAFFIC SIGNAL HEAD TO BE REMOVED

RESTORATION OF WORK AREA, RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL REMOVAL PLAN
WESTERN AVENUE AT
ILLINOIS STREET/16TH STREET
 SCALE: VERT. 1" = 20'
 HORIZ. 1" = 100'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	109
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	

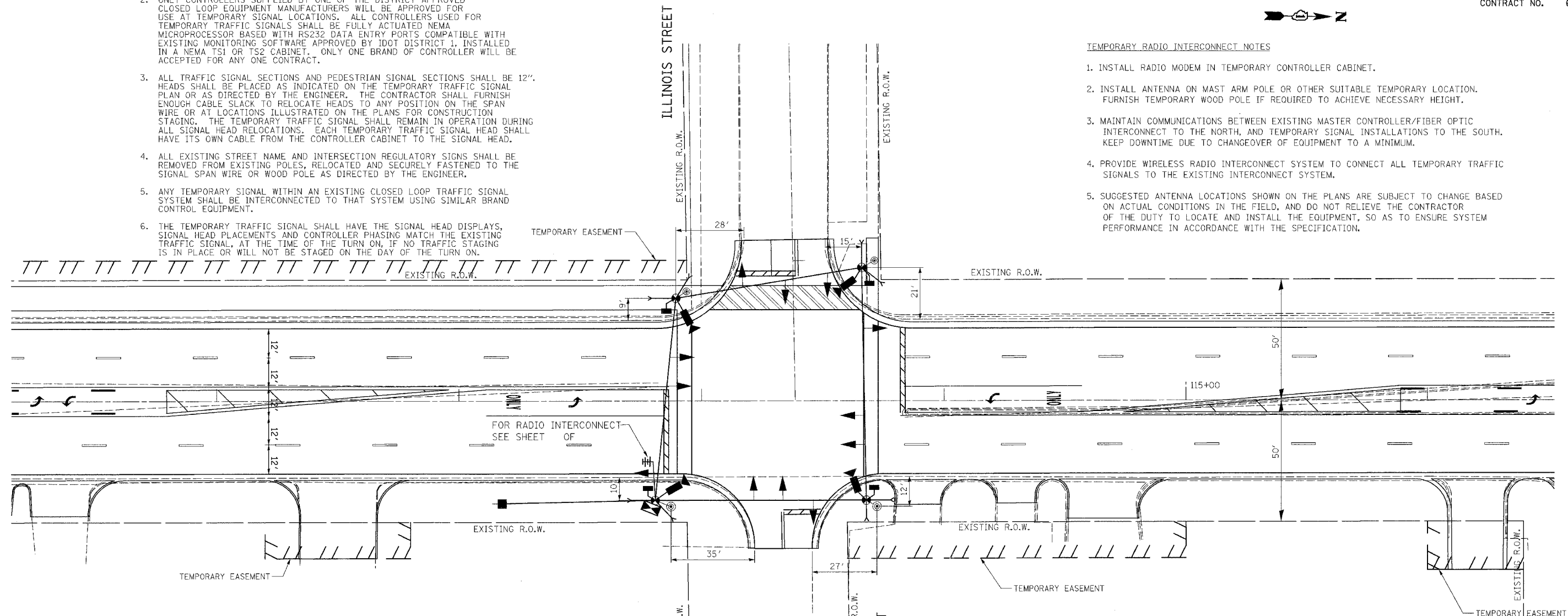
NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.



TEMPORARY RADIO INTERCONNECT NOTES

1. INSTALL RADIO MODEM IN TEMPORARY CONTROLLER CABINET.
2. INSTALL ANTENNA ON MAST ARM POLE OR OTHER SUITABLE TEMPORARY LOCATION. FURNISH TEMPORARY WOOD POLE IF REQUIRED TO ACHIEVE NECESSARY HEIGHT.
3. MAINTAIN COMMUNICATIONS BETWEEN EXISTING MASTER CONTROLLER/FIBER OPTIC INTERCONNECT TO THE NORTH, AND TEMPORARY SIGNAL INSTALLATIONS TO THE SOUTH. KEEP DOWNTIME DUE TO CHANGEOVER OF EQUIPMENT TO A MINIMUM.
4. PROVIDE WIRELESS RADIO INTERCONNECT SYSTEM TO CONNECT ALL TEMPORARY TRAFFIC SIGNALS TO THE EXISTING INTERCONNECT SYSTEM.
5. SUGGESTED ANTENNA LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS IN THE FIELD, AND DO NOT RELIEVE THE CONTRACTOR OF THE DUTY TO LOCATE AND INSTALL THE EQUIPMENT, SO AS TO ENSURE SYSTEM PERFORMANCE IN ACCORDANCE WITH THE SPECIFICATION.



TEMPORARY TRAFFIC SIGNAL LEGEND

- | | |
|---|--|
| ▶ TEMPORARY TRAFFIC SIGNAL HEAD
SPAN WIRE MOUNTED ORIGINAL LOCATION | ▲ EMERGENCY VEHICLE LIGHT DETECTOR |
| ◀ TEMPORARY TRAFFIC SIGNAL HEAD
SPAN WIRE MOUNTED SECONDARY LOCATION | ● CONFIRMATION BEACON |
| ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER)
45 FOOT (13.7m) MINIMUM | □ VEHICLE DETECTOR, INDUCTION LOOP |
| ⊠ TEMPORARY CONTROLLER CABINET | UD UNIT DUCT |
| — TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE | — G.S. CONDUIT IN TRENCH (T) OR PUSHED (P) |
| ■ TEMPORARY SERVICE INSTALLATION | ■ HANDHOLE |
| ▣ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED | ▣ HEAVY DUTY HANDHOLE |
| ▶ VIDEO VEHICLE SENSOR | CT COMMON TRENCH |
| ⊙ PEDESTRIAN PUSH-BUTTON DETECTOR | ⊠ RADIO ANTENNA (TRANSMITTER/RECEIVER) |

- NOTES:**
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE)

RESTORATION OF WORK AREA

RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

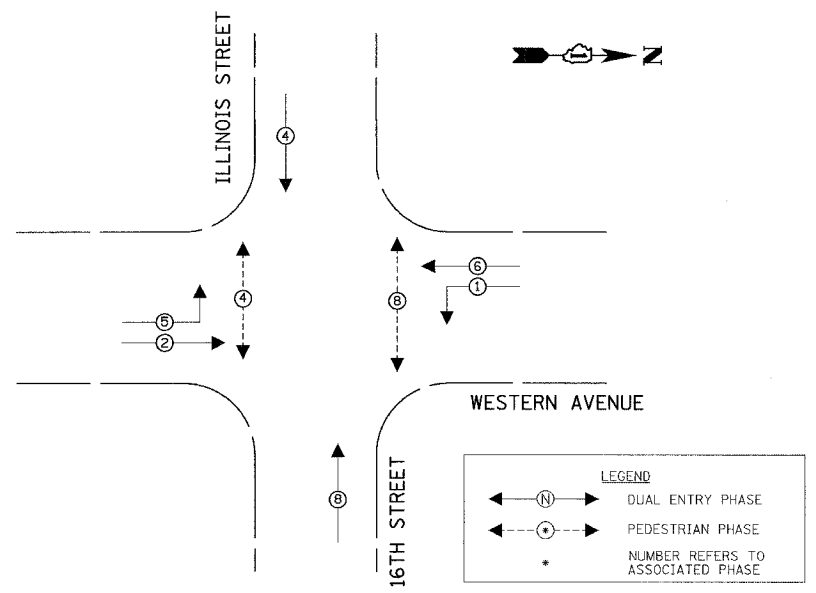
FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TEMPORARY TRAFFIC SIGNAL INSTALLATION WESTERN AVE. AT ILLINOIS ST./16TH ST. SCALE: VERT. 1" = 20' HORIZ. DATE 5/17/2007 DRAWN BY JLA DESIGNED BY KK/BPT CHECKED BY JTL/BPT

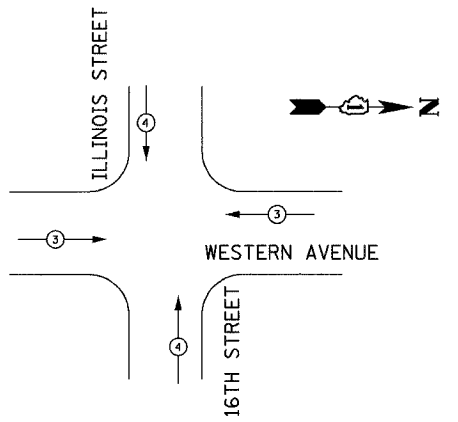
PREPARED BY:
CEMCON, L4
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Burrage, MO 65604-5675 862-6199
 Faxes: 862-6199
 E-Mail: info@cemcon.com Website: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	110
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62742				

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

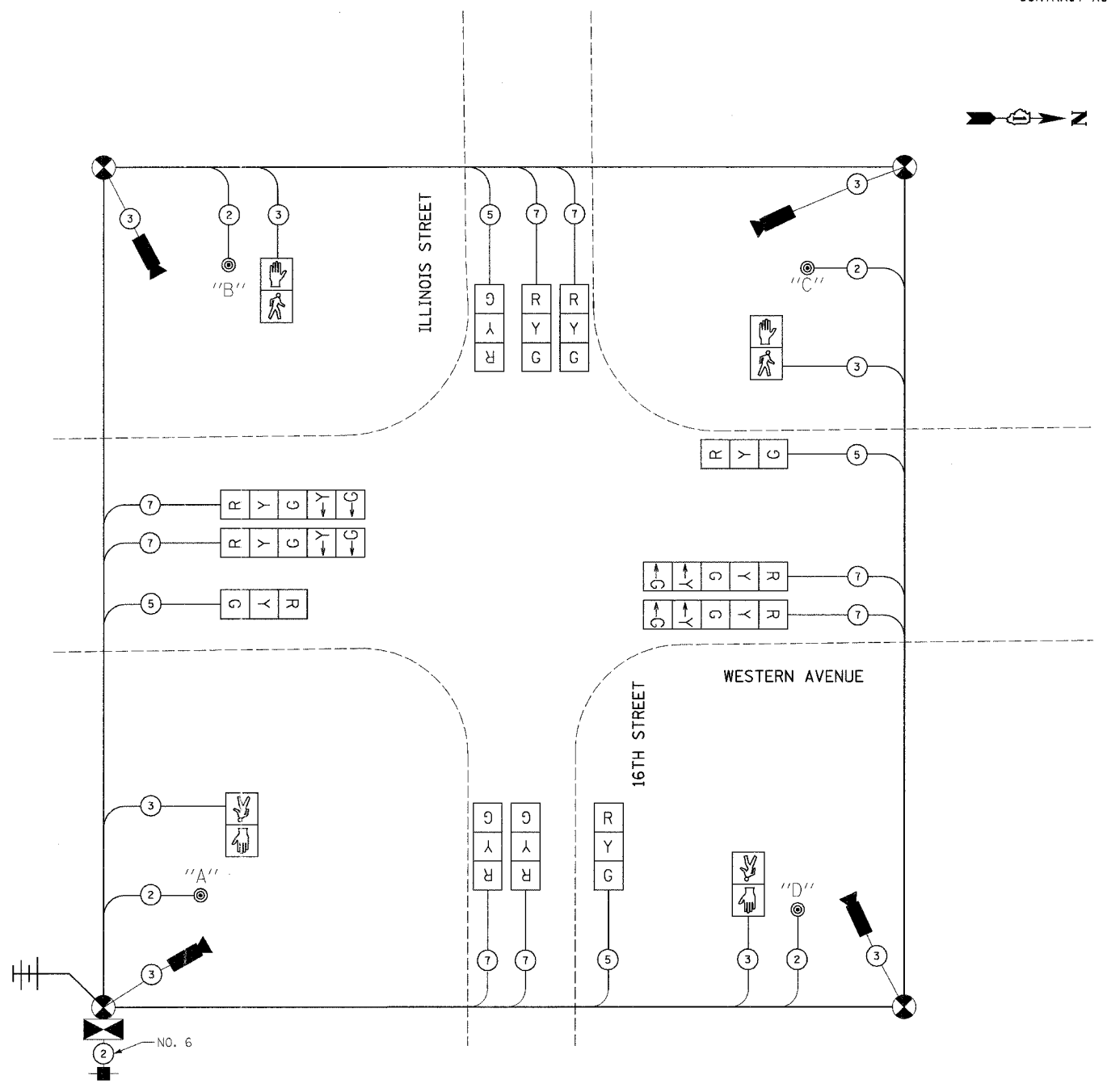


EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇌	⇌

EMERGENCY VEHICLE PREEMPTION SEQUENCE

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSH-BUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE SENSOR
- RADIO ANTENNA (TRANSMITTER/RECEIVER)
- TEMPORARY WOOD POLE



TEMPORARY CABLE PLAN

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND. LED	OPERATION		
SIGNAL (RED)	11	135	17	0.50	93.5
(YELLOW)	11	135	25	0.25	68.75
(GREEN)	11	135	15	0.25	41.25
ARROW	4	135	12	0.10	4.8
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	308.3

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

NOTES:
 1. CABLES FOR VIDEO DETECTORS AND RADIO ANTENNAS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURERS OF THE EQUIPMENT.
 2. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY
 CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 SCHEDULE OF QUANTITIES
 WESTERN AVE. AT ILLINOIS ST. /16TH ST.
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PLOT DATE = 5/18/2007
 FILE NAME = J:\projects\3028054\sign\shs\24_TC_IL110b.dgn
 USER = JLA

PREPARED BY:
CEMCON, L.L.C.
 Consulting Engineers, Land Surveyors & Planners
 2880 White Oak Circle, Suite 100
 Huntley, Illinois 60149
 Phone: 815.399.8500
 Fax: 815.399.8501
 E-Mail: info@cemcon.com Website: www.cemcon.com

CABLE PLAN LEGEND

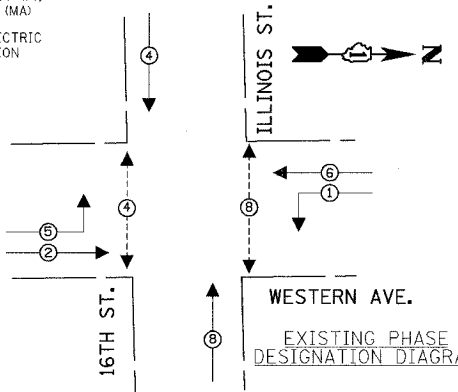
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSH-BUTTON DETECTOR
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
[Symbol]	[Symbol]	SIGNAL FACE W/BACKPLATE, "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (C), OR CONTROLLER (C)
[Symbol]	[Symbol]	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

SCHEDULE OF QUANTITIES

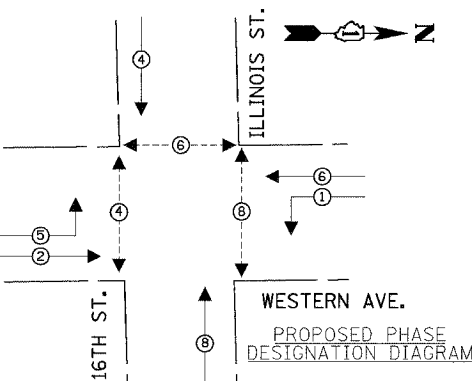
ITEM	UNIT	QUANTITY
RELOCATE SIGN PANEL, TYPE 1	SQ FT	27
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	69
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	125
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	111
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	618
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	911
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1548
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	675
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1914
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	63
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	629
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	5159
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	8
SERVICE INSTALLATION, GROUND MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6, 1C	FOOT	460
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	128
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	112
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	

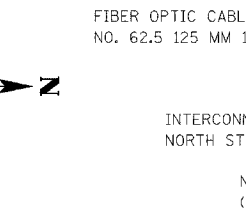
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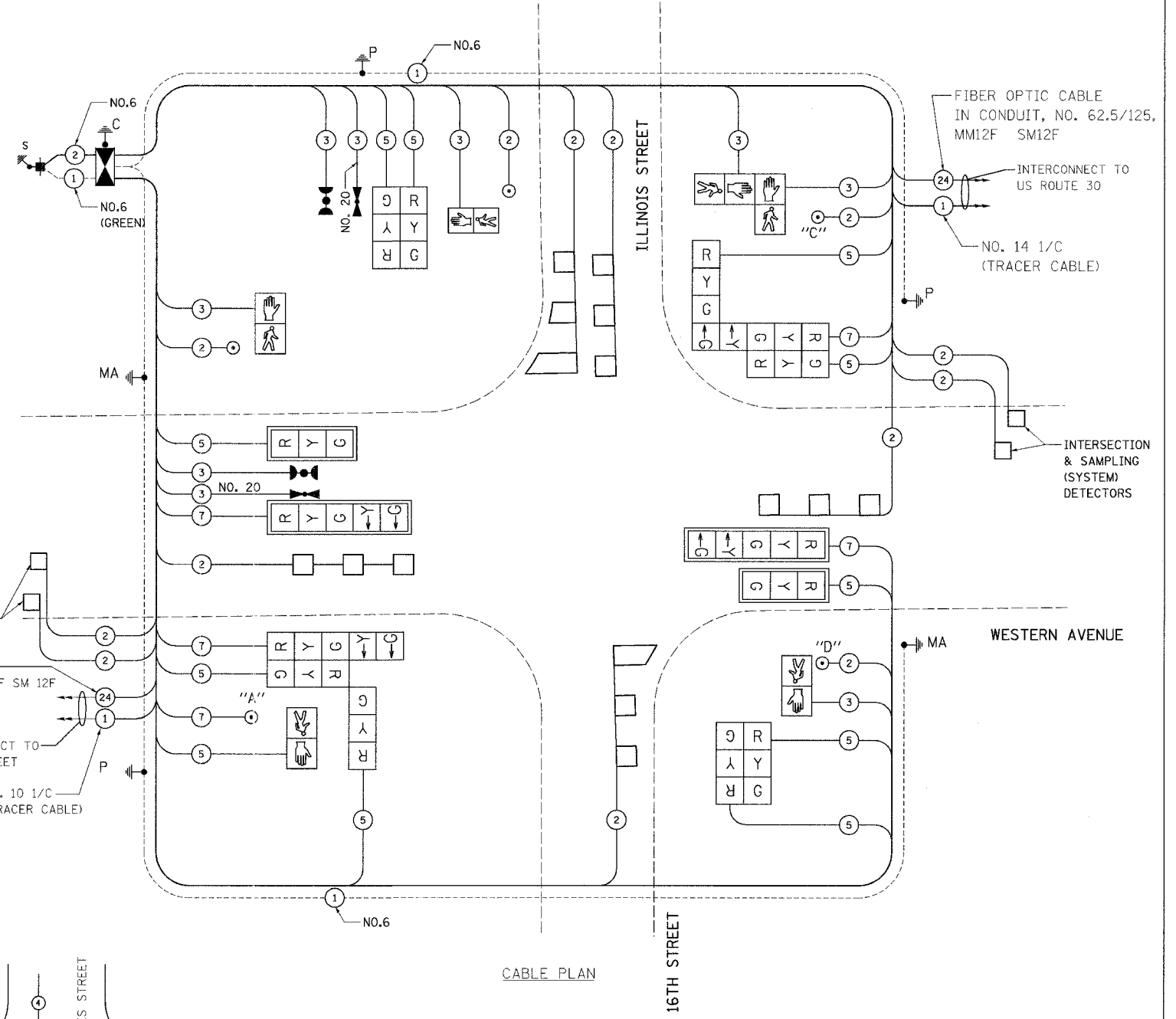
CONTROLLER SEQUENCE



INTERSECTION & SAMPLING (SYSTEM) DETECTORS



FIBER OPTIC CABLE NO. 62.5 125 MM 12F SM 12F
 INTERCONNECT TO NORTH STREET
 NO. 10 1/C (TRACER CABLE)

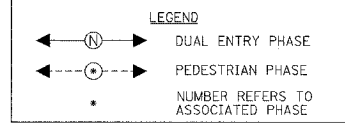


PUSH-BUTTON NOTES:

1. PUSH-BUTTON "C" SHALL PLACE A CALL TO PHASES 6 AND 8.

NOTE:
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION		
SIGNAL (RED)	14	135	17	0.50		119
(YELLOW)	14	135	25	0.25		87.5
(GREEN)	14	135	15	0.25		52.5
ARROW	8	135	12	0.10		9.6
PED. SIGNAL	6	90	25	1.00		150
CONTROLLER	1	100	100	1.00		100
ILLUM. SIGN		84		0.05		
FLASHER				0.50		
TOTAL =						518.6



FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

EMERGENCY VEHICLE PREEMPTION SEQUENCE




PROPOSED EMERGENCY VEHICLE PREEMPTOR	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	← →

REVISIONS	
NAME	DATE

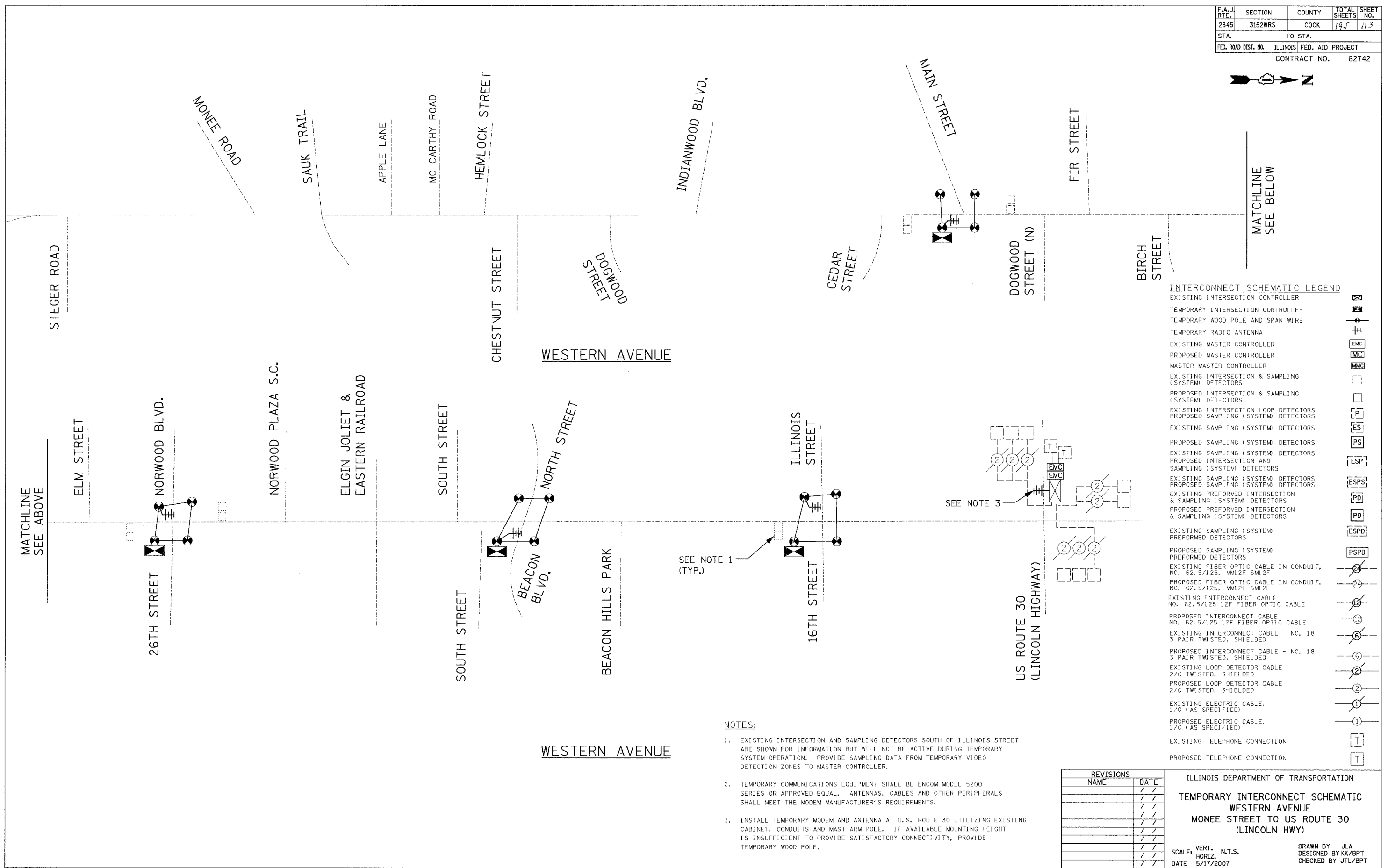
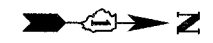
ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM, SCHEDULE OF QUANTITIES
WESTERN AVE. AT ILLINOIS ST./16TH ST.
 SCALE: VERT. NONE
 HORIZ. 1"=20'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PLOT DATE = 5/18/2007
 PLOT SCALE = 1"=20'
 USER NAME = JLA
































PREPARED BY:
CEMCON Ltd.
 Consulting Engineers, Surveyors & Planners
 2280 White Oak Circle - Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	113
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	



INTERCONNECT SCHEMATIC LEGEND

- EXISTING INTERSECTION CONTROLLER 
- TEMPORARY INTERSECTION CONTROLLER 
- TEMPORARY WOOD POLE AND SPAN WIRE 
- TEMPORARY RADIO ANTENNA 
- EXISTING MASTER CONTROLLER 
- PROPOSED MASTER CONTROLLER 
- MASTER MASTER CONTROLLER 
- EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- EXISTING INTERSECTION LOOP DETECTORS 
- PROPOSED SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) DETECTORS 
- PROPOSED SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) DETECTORS AND SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) DETECTORS AND SAMPLING (SYSTEM) DETECTORS 
- EXISTING PERFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- PROPOSED PERFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS 
- EXISTING SAMPLING (SYSTEM) PERFORMED DETECTORS 
- PROPOSED SAMPLING (SYSTEM) PERFORMED DETECTORS 
- EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM2F SM2F 
- PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM2F SM2F 
- EXISTING INTERCONNECT CABLE NO. 62.5/125 12F FIBER OPTIC CABLE 
- PROPOSED INTERCONNECT CABLE NO. 62.5/125 12F FIBER OPTIC CABLE 
- EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED 
- PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED 
- EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED 
- PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED 
- EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED) 
- PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED) 
- EXISTING TELEPHONE CONNECTION 
- PROPOSED TELEPHONE CONNECTION 

NOTES:

1. EXISTING INTERSECTION AND SAMPLING DETECTORS SOUTH OF ILLINOIS STREET ARE SHOWN FOR INFORMATION BUT WILL NOT BE ACTIVE DURING TEMPORARY SYSTEM OPERATION. PROVIDE SAMPLING DATA FROM TEMPORARY VIDEO DETECTION ZONES TO MASTER CONTROLLER.
2. TEMPORARY COMMUNICATIONS EQUIPMENT SHALL BE ENCOM MODEL 5200 SERIES OR APPROVED EQUAL. ANTENNAS, CABLES AND OTHER PERIPHERALS SHALL MEET THE MODEM MANUFACTURER'S REQUIREMENTS.
3. INSTALL TEMPORARY MODEM AND ANTENNA AT U.S. ROUTE 30 UTILIZING EXISTING CABINET, CONDUITS AND MAST ARM POLE. IF AVAILABLE MOUNTING HEIGHT IS INSUFFICIENT TO PROVIDE SATISFACTORY CONNECTIVITY, PROVIDE TEMPORARY WOOD POLE.

REVISIONS	
NAME	DATE

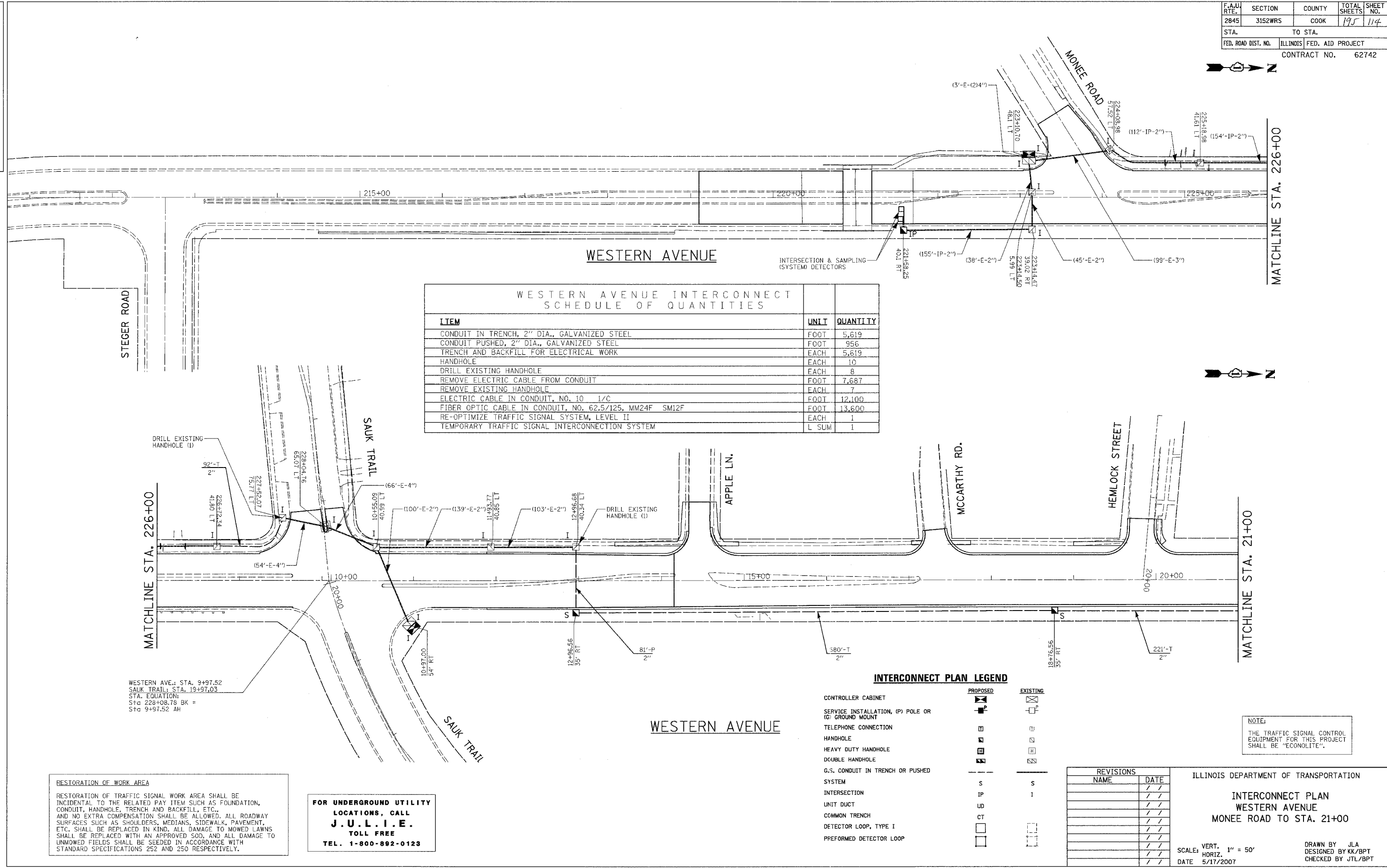
ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INTERCONNECT SCHEMATIC
WESTERN AVENUE
MONEE STREET TO US ROUTE 30
(LINCOLN HWY)

SCALE: VERT. N.T.S.
 HORIZ. N.T.S.
 DATE 5/17/2007

DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PLOT DATE = 5/18/2007
 FILE NAME = J:\vncorrest\322895\1.dgn\hva\127.Temp Interconnect.schematic.dgn
 USER NAME = JLA

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	114
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO.	62742



ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	5,619
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	956
TRENCH AND BACKFILL FOR ELECTRICAL WORK	EACH	5,619
HANDHOLE	EACH	10
DRILL EXISTING HANDHOLE	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7,687
REMOVE EXISTING HANDHOLE	EACH	7
ELECTRIC CABLE IN CONDUIT, NO. 10 1/C	FOOT	12,100
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	FOOT	13,600
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL II	EACH	1
TEMPORARY TRAFFIC SIGNAL INTERCONNECTION SYSTEM	L SUM	1

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED SYSTEM	S	S
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
DETECTOR LOOP, TYPE I	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE".

RESTORATION OF WORK AREA
RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALK, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

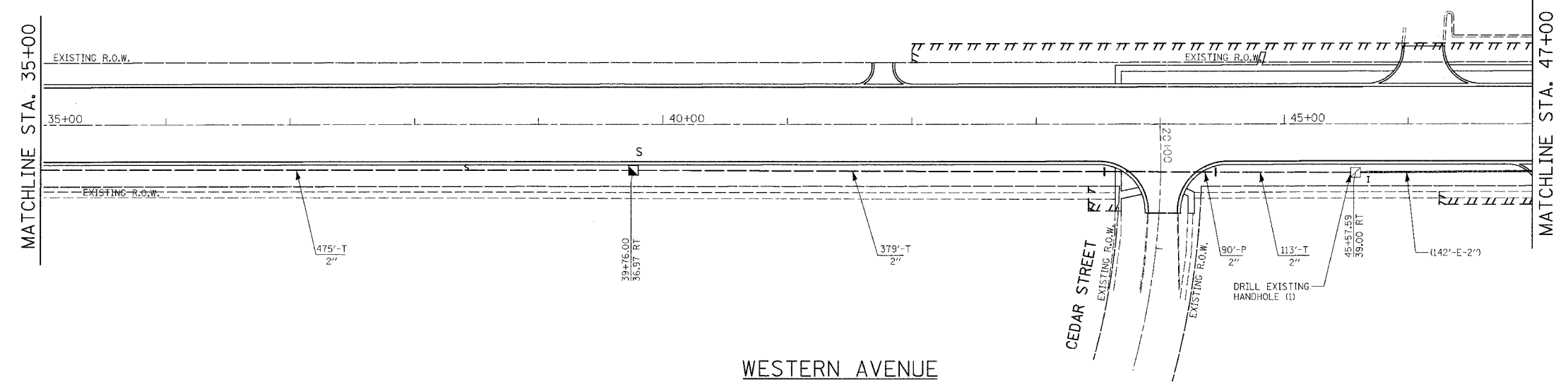
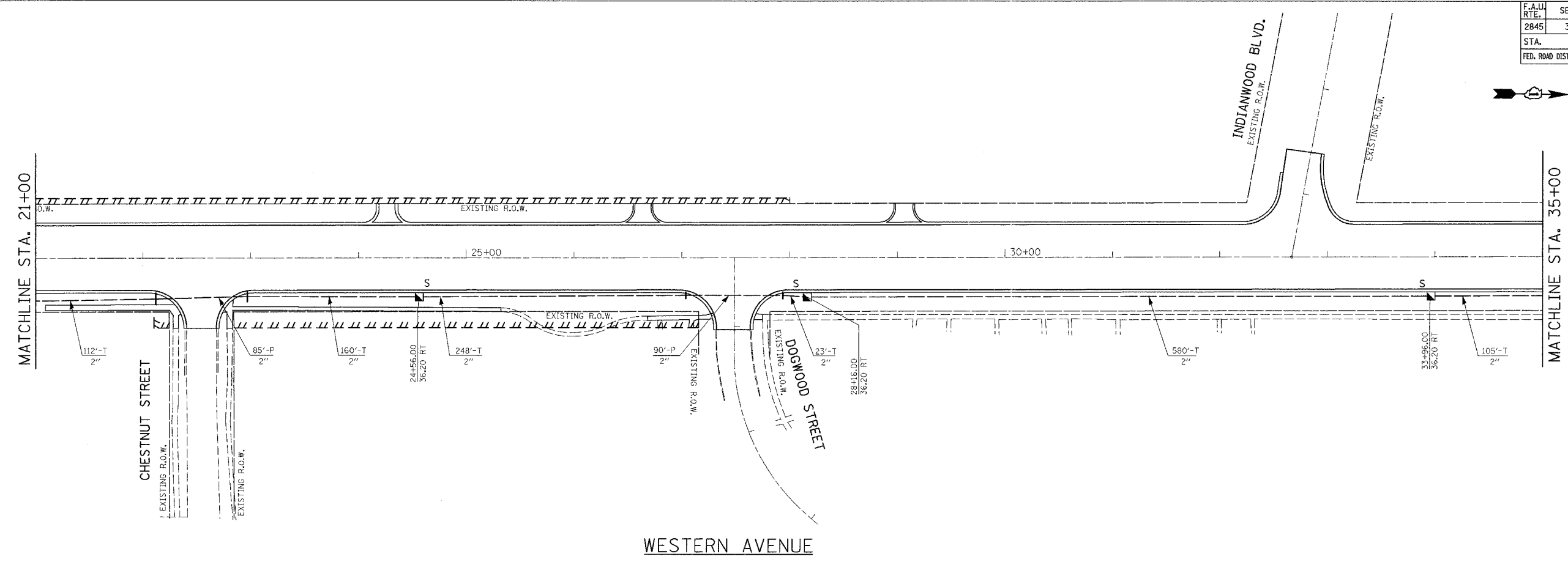
FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
WESTERN AVENUE
MONEE ROAD TO STA. 21+00
SCALE: VERT. 1" = 50'
HORIZ. 1" = 50'
DATE 5/11/2007
DRAWN BY JLA
DESIGNED BY KK/BPT
CHECKED BY JTL/BPT

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Naperville, Illinois 60563
 Tel: 630.682.2100 Fax: 630.682.2199
 E-Mail: info@cemcon.com Website: www.cemcon.com

F.A.I.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	115
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 62742	



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
SYSTEM	S	S
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
DETECTOR LOOP, TYPE I	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]

RESTORATION OF WORK AREA
 RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALK, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	NAME	DATE

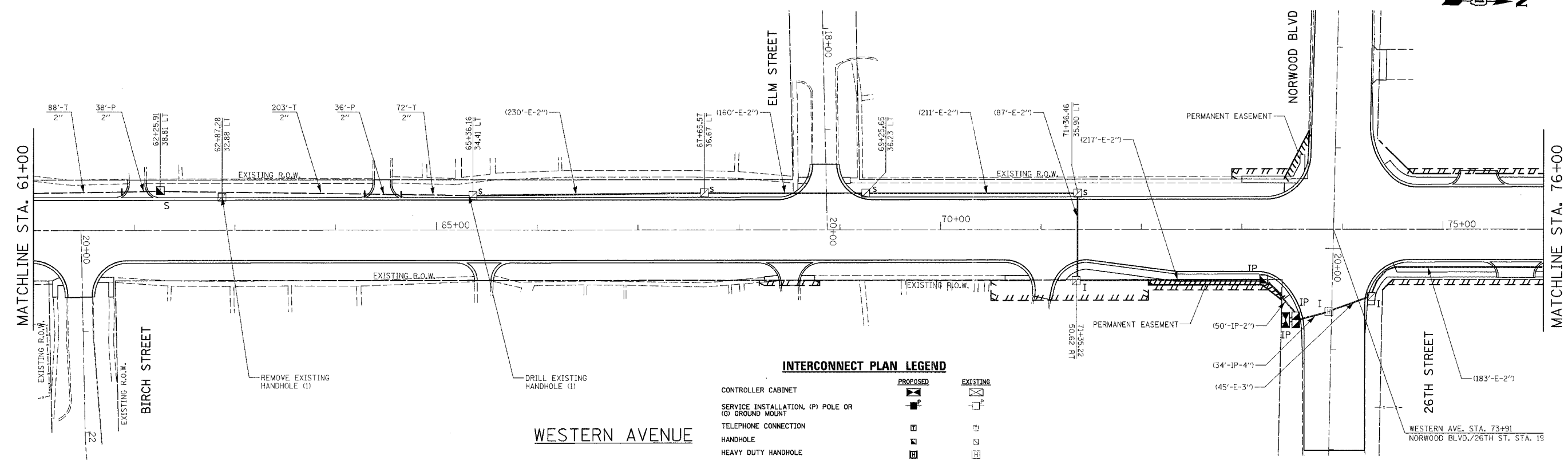
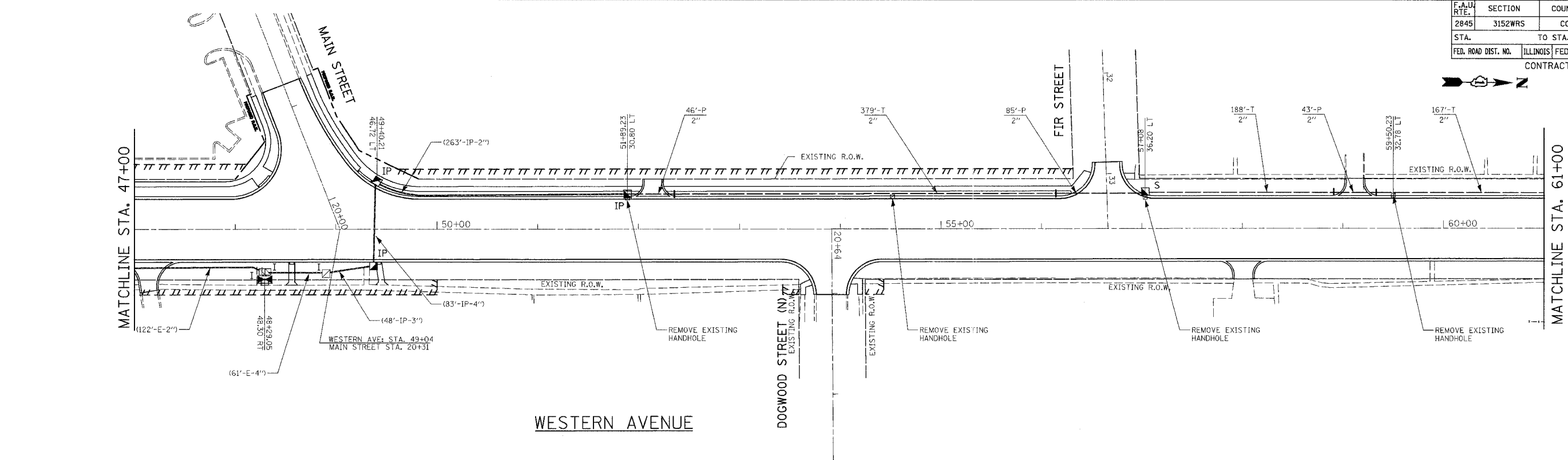
ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
WESTERN AVENUE
STA. 21+00 TO STA. 47+00
 SCALE: VERT. 1" = 50'
 HORIZ. 1" = 100'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

PLOT DATE = 5/18/2007
 FILE NAME = I:\projects\3022005\4\fig\plan\39_1inter2.dgn
 PLOT SCALE = 1"=50'
 USER NAME = JLA

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	116
STA. 47+00		TO STA. 61+00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 62742		



INTERCONNECT PLAN LEGEND

CONTROLLER CABINET		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT		
TELEPHONE CONNECTION		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
SYSTEM	S	S
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
DETECTOR LOOP, TYPE 1		
PREFORMED DETECTOR LOOP		

RESTORATION OF WORK AREA
 RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALK, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

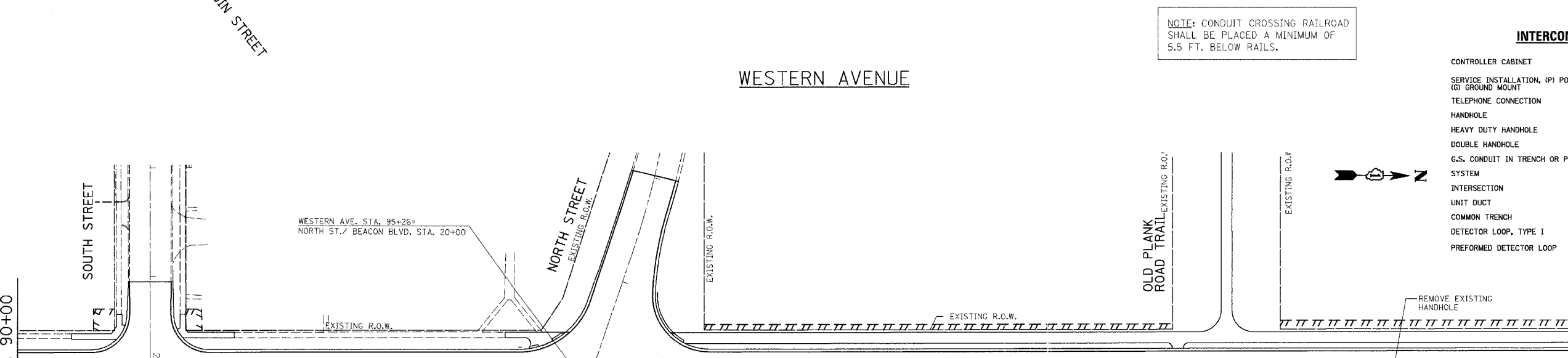
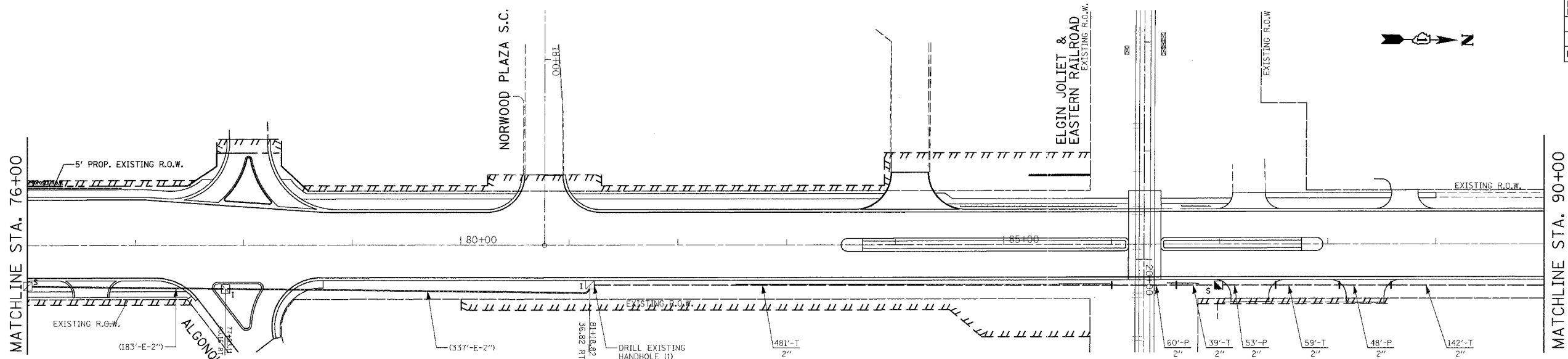
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
WESTERN AVENUE
STA. 47+00 TO STA. 76+00
 SCALE: VERT. 1" = 50'
 HORIZ. 1" = 50'
 DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PLOT DATE = 5/19/2007
 PLOT SCALE = 1" = 50'
 USER NAME = JLA

PREPARED BY:
CEMCON, Ltd.
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 E-Mail: cemcon@cemcon.com www.cemcon.com

F.A.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	117
STA. 76+00		TO STA. 104+50		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		CONTRACT NO. 62742	



NOTE: CONDUIT CROSSING RAILROAD SHALL BE PLACED A MINIMUM OF 5.5 FT. BELOW RAILS.

INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET	[Symbol]	[Symbol]
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	[Symbol]	[Symbol]
TELEPHONE CONNECTION	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED SYSTEM	S	S
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
DETECTOR LOOP, TYPE I	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]

FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

RESTORATION OF WORK AREA
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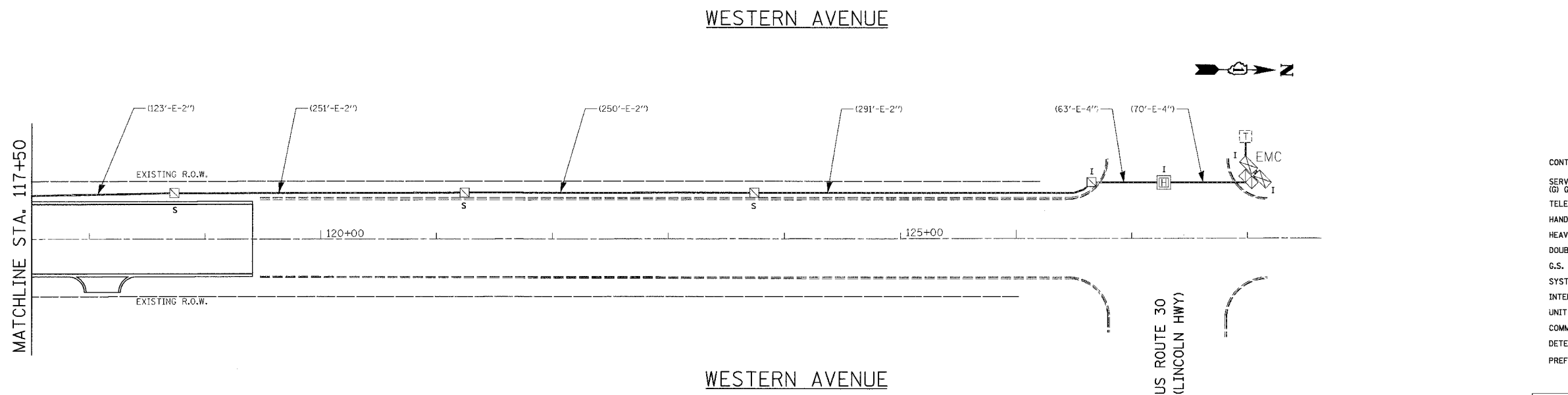
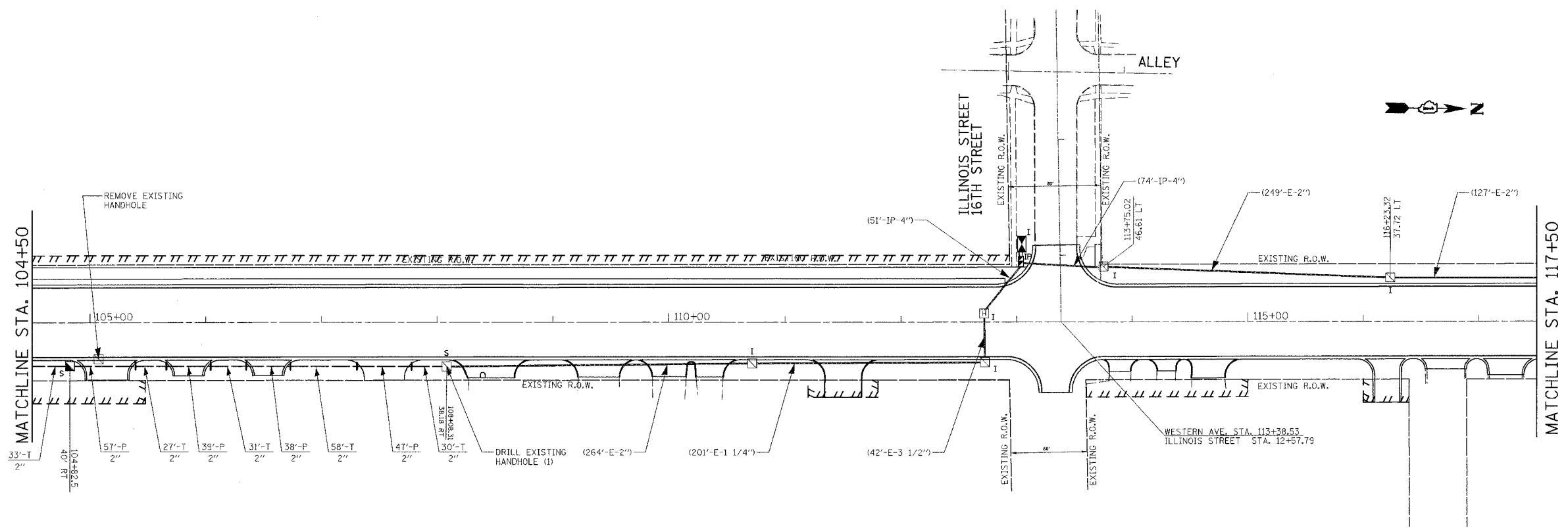
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
WESTERN AVENUE
STA. 76+00 TO STA. 104+50
 SCALE: VERT. 1" = 50'
 HORIZ. 1" = 50'
 DATE: 5/17/2007
 DRAWN BY: JLA
 DESIGNED BY: KK/BPT
 CHECKED BY: JTL/BPT

PLOT DATE = 5/18/2007
 FILE NAME = J:\Users\jla\Documents\31220064\31220064.dgn
 PLOT SCALE = 1/2" = 1'-0"
 USER NAME = JLA

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CEMCON Ltd.
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 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675, USA
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 Fax: 630-596-5101
 E-Mail: info@cemcon.com Web: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	118
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 62742		



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER CABINET		
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT		
TELEPHONE CONNECTION		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
SYSTEM	S	S
INTERSECTION	IP	I
UNIT DUCT	UD	
COMMON TRENCH	CT	
DETECTOR LOOP, TYPE I		
PERFORMED DETECTOR LOOP		

RESTORATION OF WORK AREA
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REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 WESTERN AVENUE
 STA. 104+50 TO US ROUTE 30
 (LINCOLN HWY)
 SCALE: VERT. 1" = 50'
 HORIZ. 1" = 50'
 DATE: 5/17/2007
 DRAWN BY: JLA
 DESIGNED BY: KK/BPT
 CHECKED BY: JTL/BPT

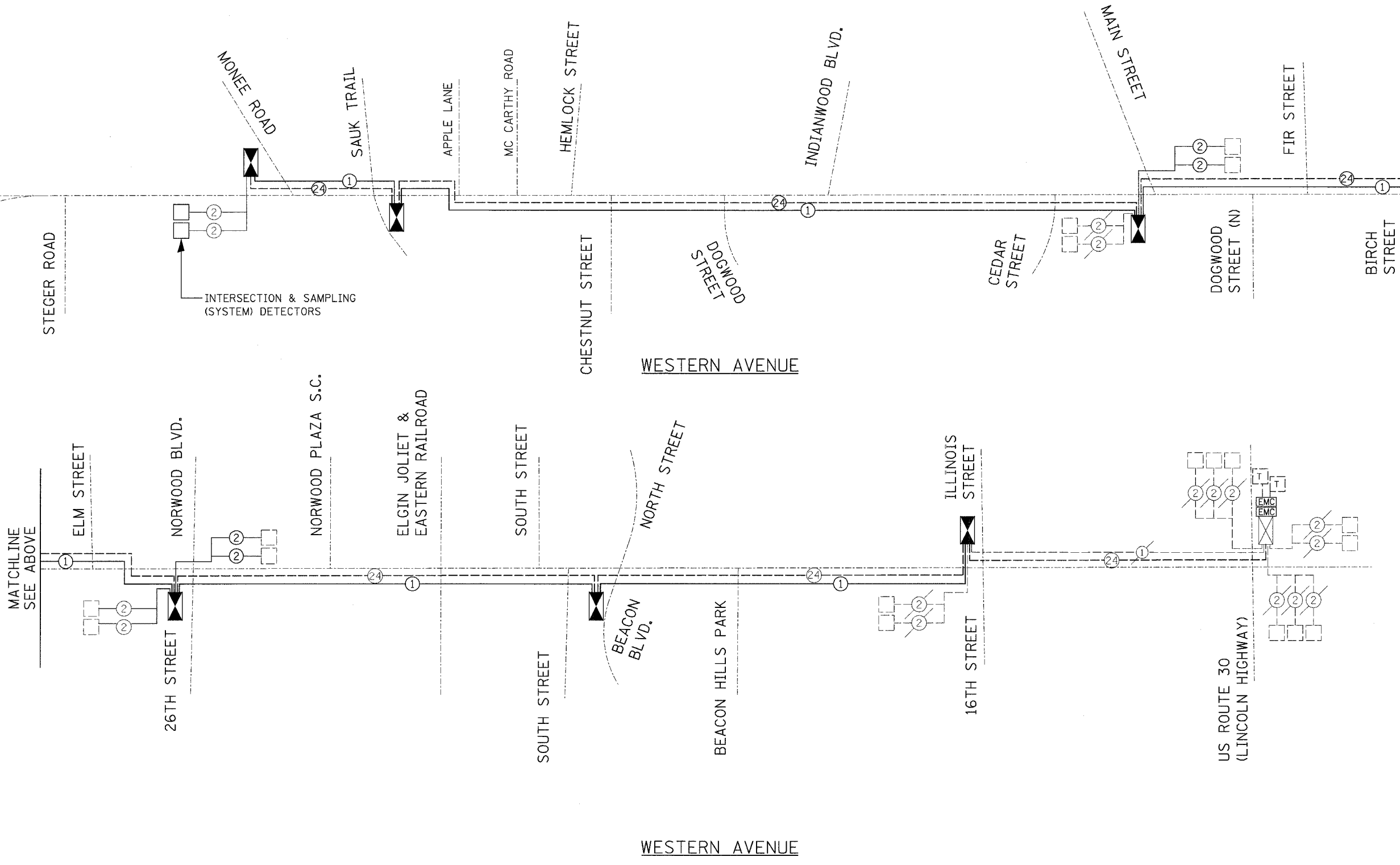
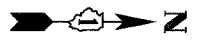
FOR UNDERGROUND UTILITY LOCATIONS, CALL J.U.L.I.E. TOLL FREE TEL. 1-800-892-0123

PLOT DATE = 5/18/2007
 FILE NAME = J:\nrcost\3022805\1\ugr\hwh\132_inverc5.dgn
 USER NAME = JLA

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	119
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
				CONTRACT NO. 62742



INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	
PROPOSED MASTER CONTROLLER	
MASTER MASTER CONTROLLER	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS AND SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS AND SAMPLING (SYSTEM) DETECTORS	
EXISTING SAMPLING (SYSTEM) DETECTORS	
PROPOSED SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERCONNECT CABLE NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED INTERCONNECT CABLE NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING TELEPHONE CONNECTION	
PROPOSED TELEPHONE CONNECTION	

MATCHLINE SEE ABOVE

MATCHLINE SEE BELOW

PLOT DATE = 5/18/2007
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NAME	DATE

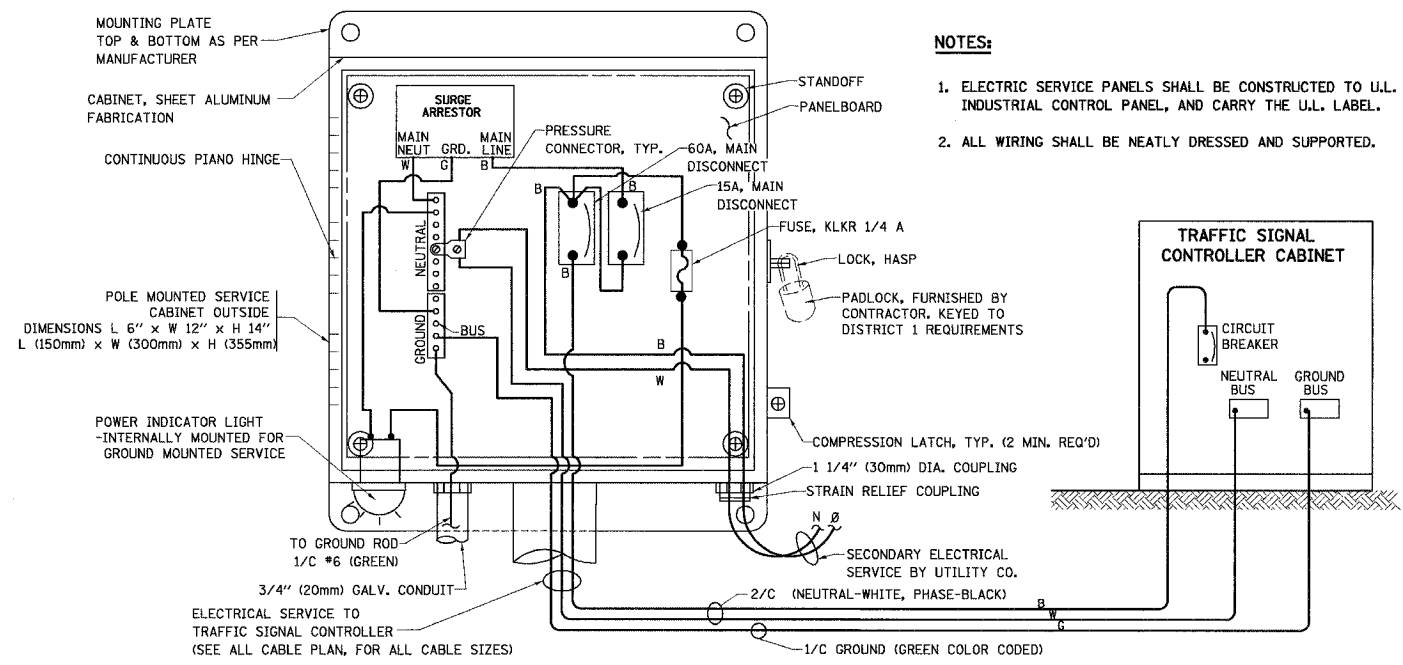
ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT SCHEMATIC
WESTERN AVENUE
MONEE STREET TO US ROUTE 30
(LINCOLN HWY)

SCALE: VERT. 1" = 100'
 HORIZ. 1" = 100'
 DATE 5/17/2007

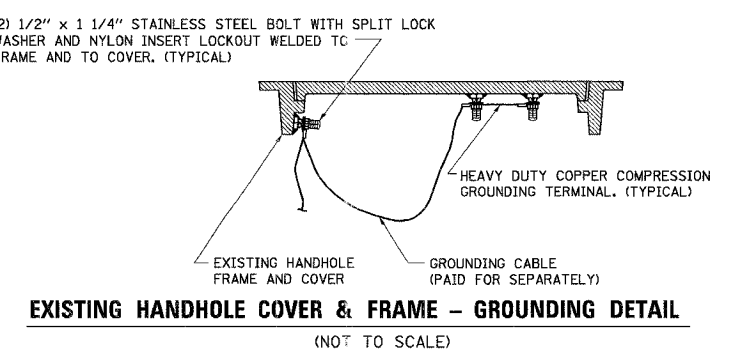
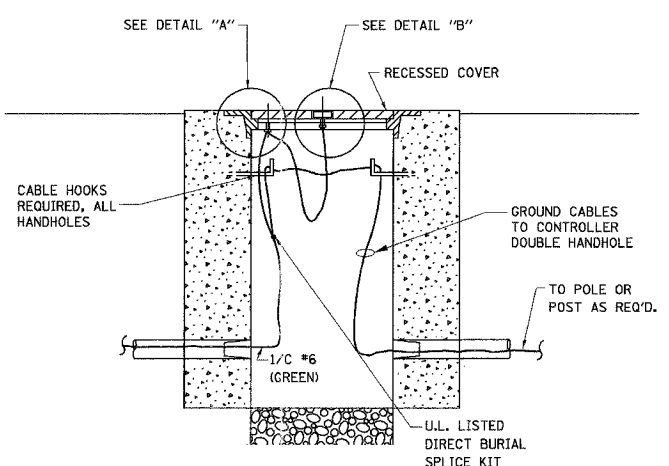
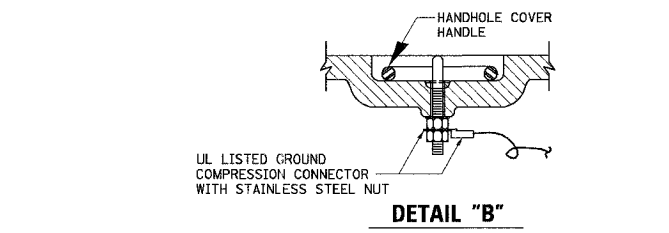
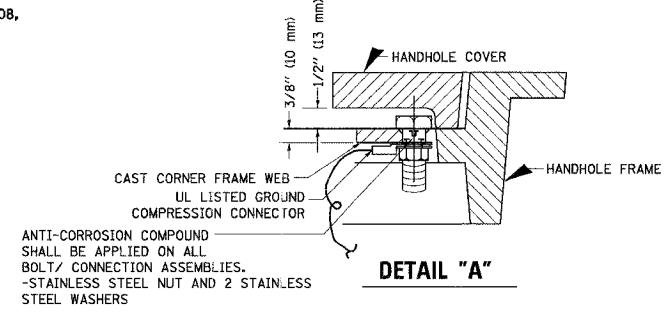
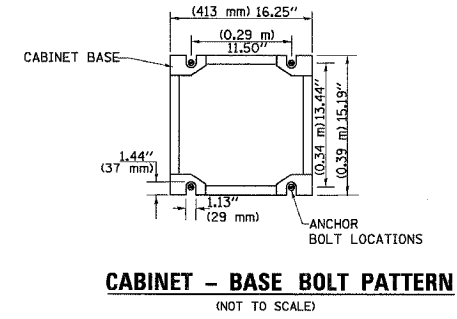
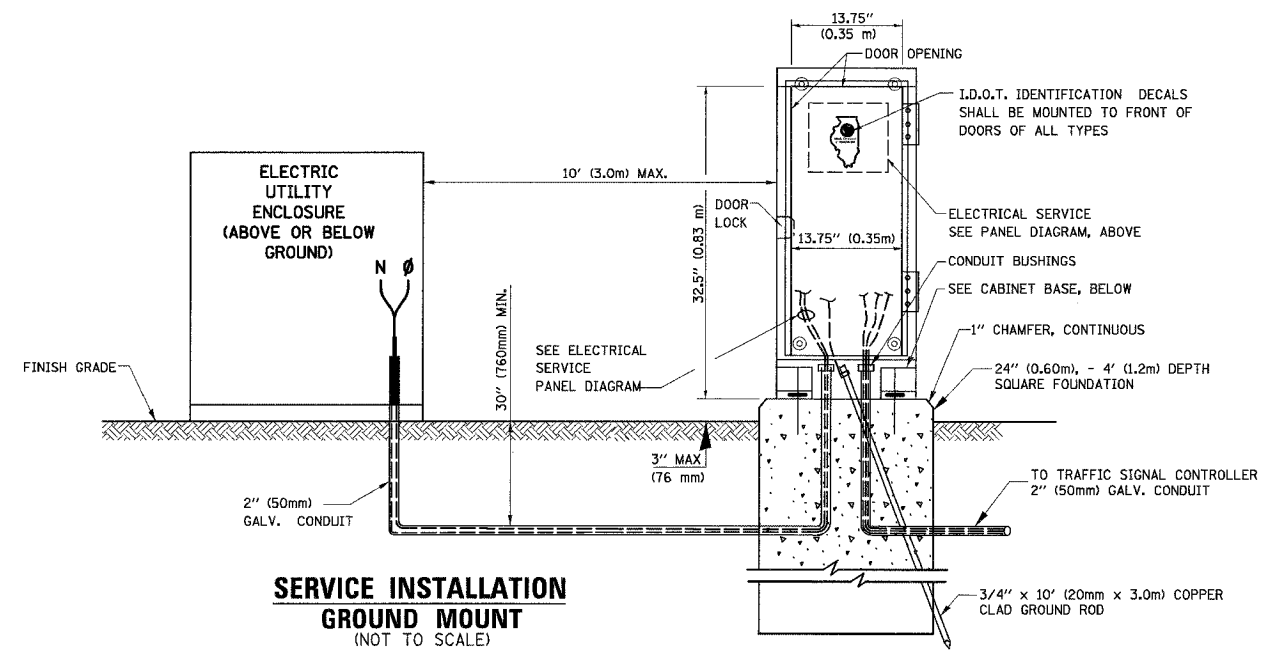
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 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

PREPARED BY:
CEMCON Ltd.
 Consulting Engineers, Land Surveyors & Planners
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 P.O. Box 662, Dallas, TX 75206
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 Fax: 972.462.2100
 E-Mail: cec@cemcon.com Website: www.cemcon.com

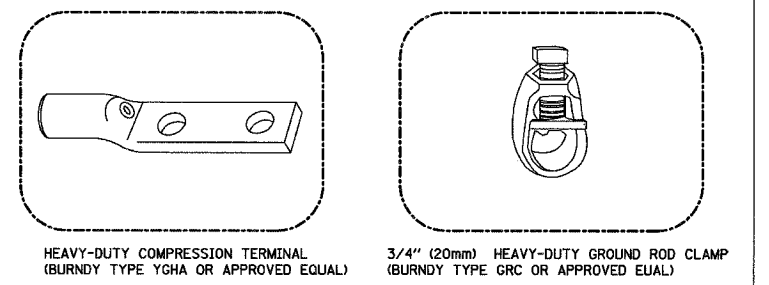
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO.			62742	



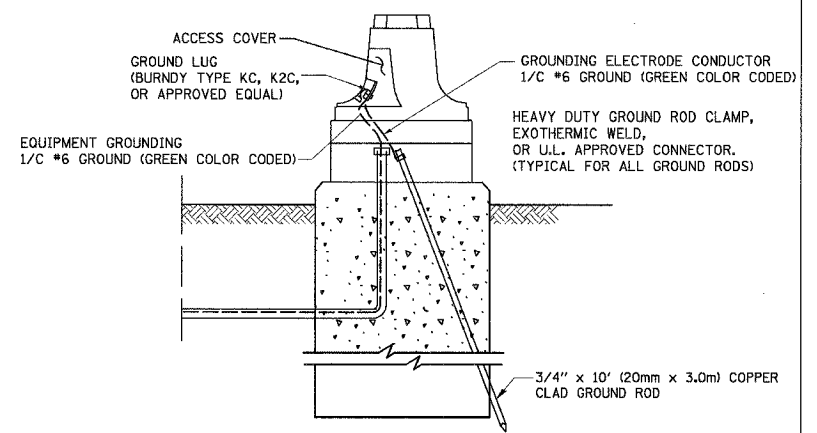
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



- NOTES:**
- GROUNDING SYSTEM**
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
 - THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 - ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 - THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NOT TO SCALE
 HORIZ. NOT TO SCALE
 DATE 5/17/2007

DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

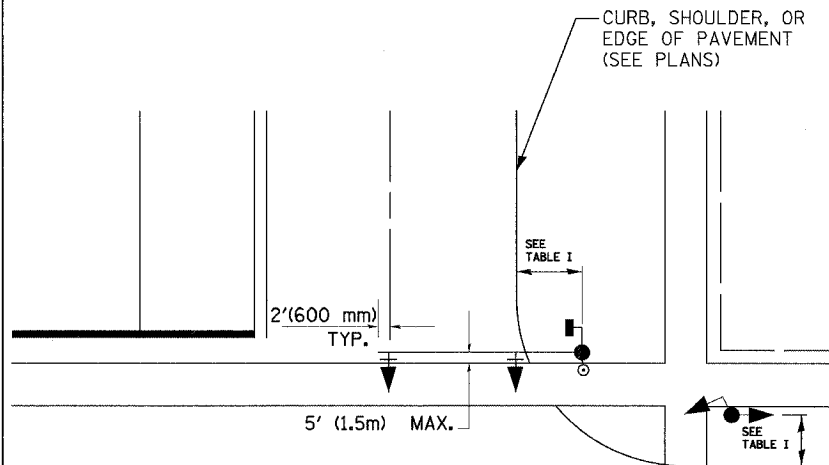
PLOT DATE = 5/19/2007
 PLOT SCALE = 1"=20'
 USER NAME = JLA

PREPARED BY:
CEMCON, Ltd.
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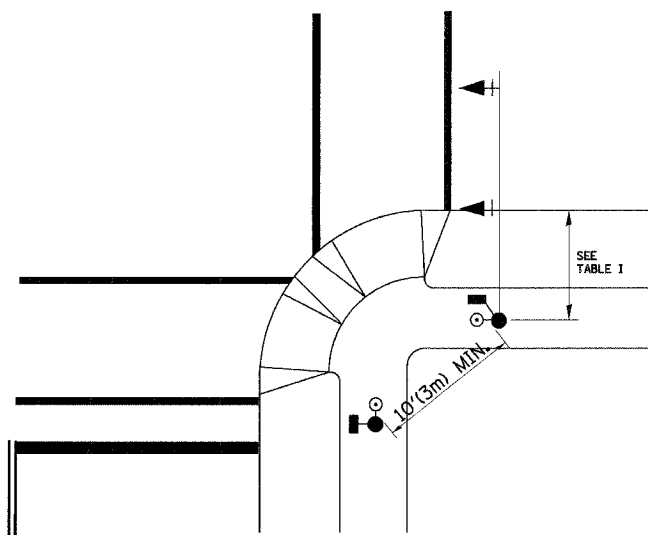
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	145	121
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 62742		

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK.
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

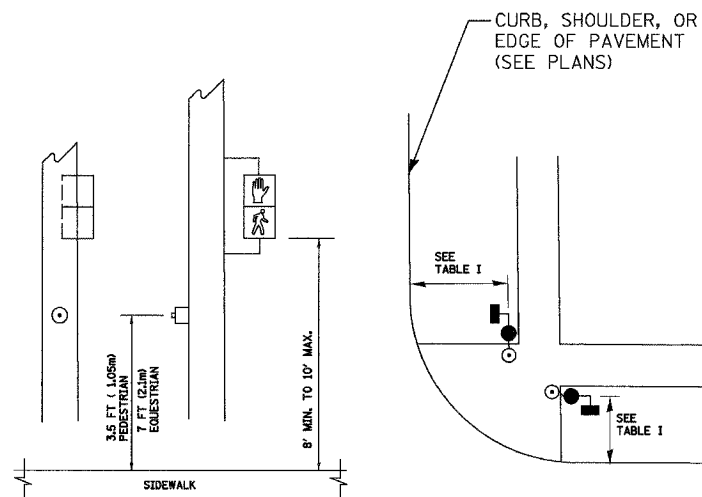


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

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 USER NAME = JLN

REVISIONS	
NAME	DATE

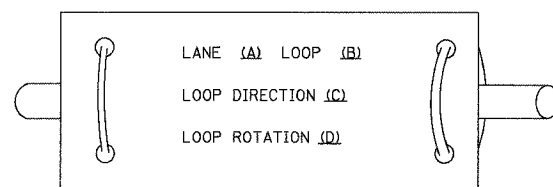
ILLINOIS DEPARTMENT OF TRANSPORTATION
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
 SCALE: VERT. NOT TO SCALE
 HORIZ. DATE: 5/17/2007
 DRAWN BY: JLA
 DESIGNED BY: KK/BPT
 CHECKED BY: JTL/BPT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152WRS	COOK	195	122
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 62742

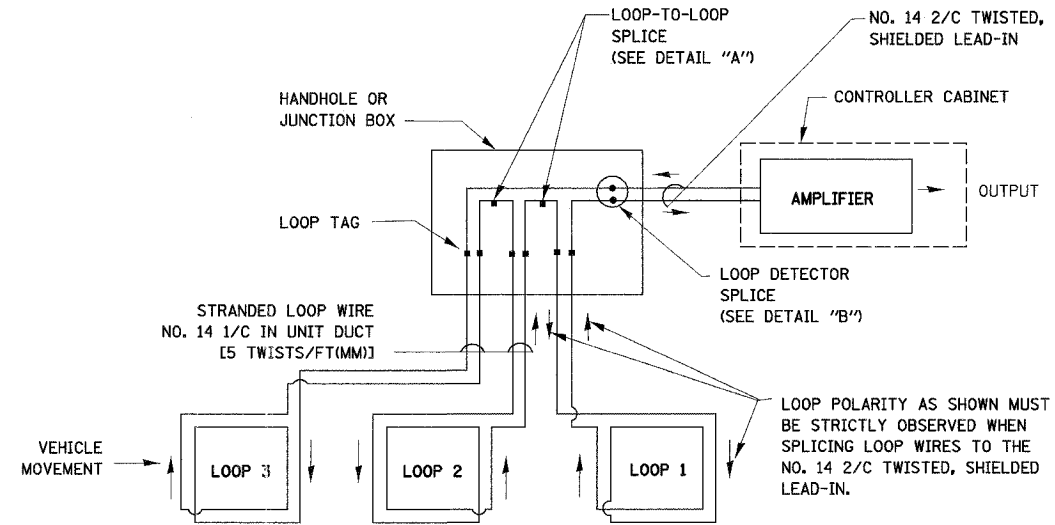
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PERFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

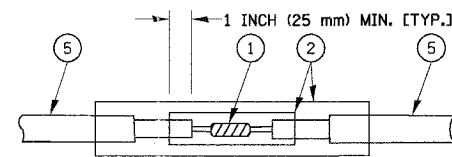


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

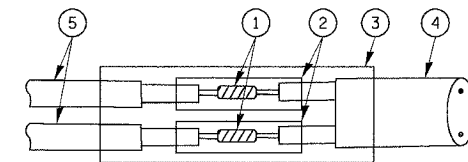


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

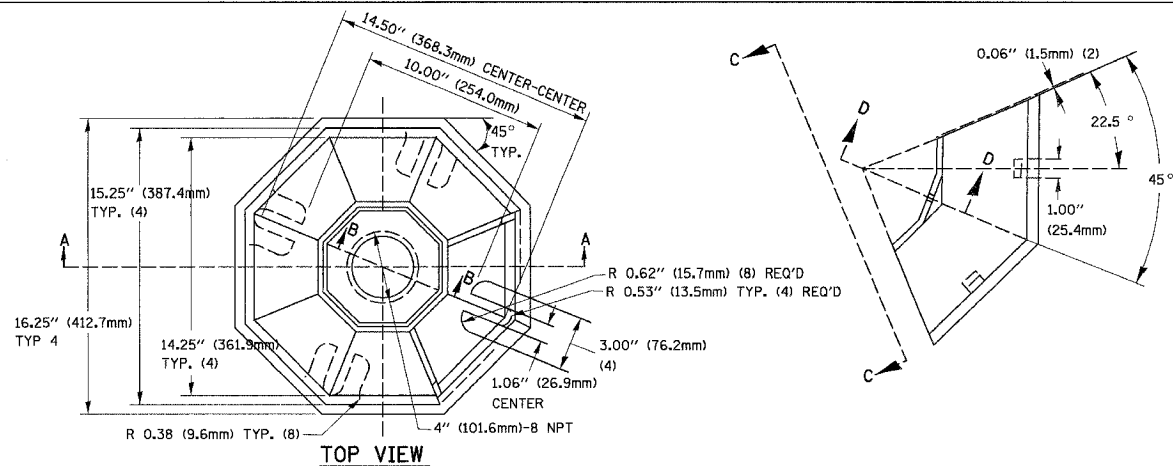
- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

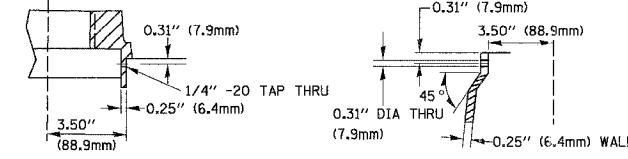
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: VERT. NOT TO SCALE
 HORIZ.
 DATE: 5/17/2007

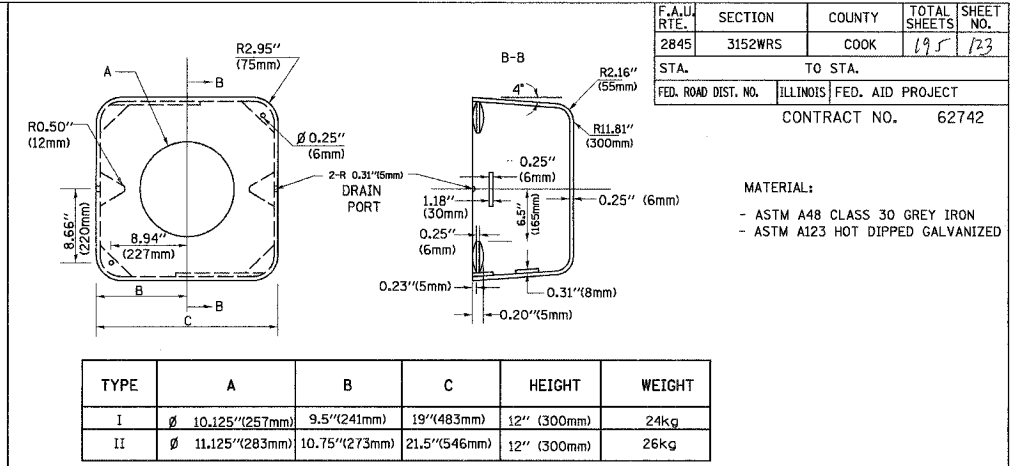
DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT



SECTION B-B

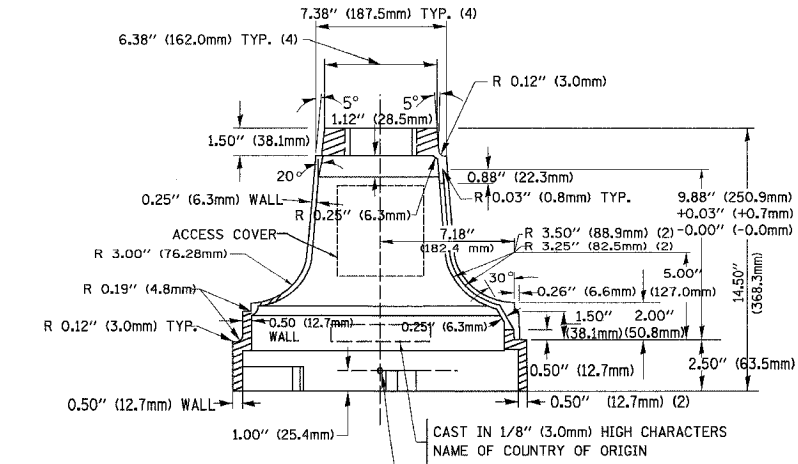


SECTION D-D

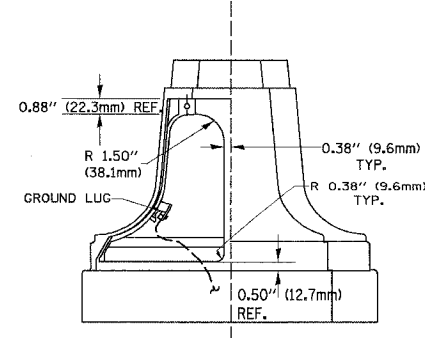


TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125\"(257mm)	9.5\"(241mm)	19\"(483mm)	12\"(300mm)	24kg
II	∅ 11.125\"(283mm)	10.75\"(273mm)	21.5\"(546mm)	12\"(300mm)	26kg

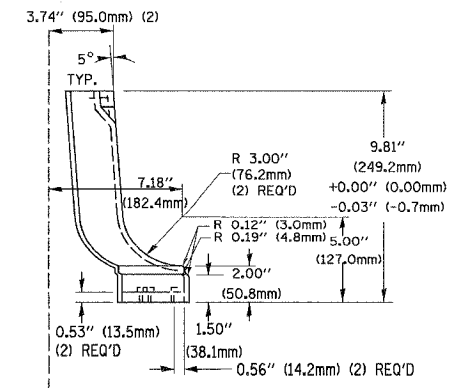
SHROUD DETAIL



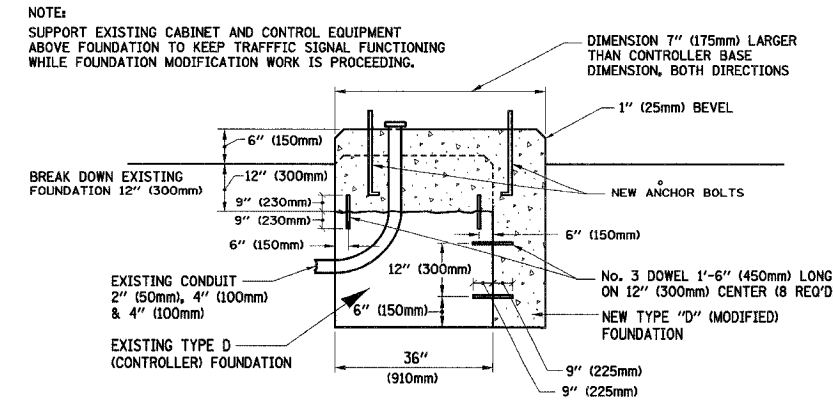
SECTION A-A



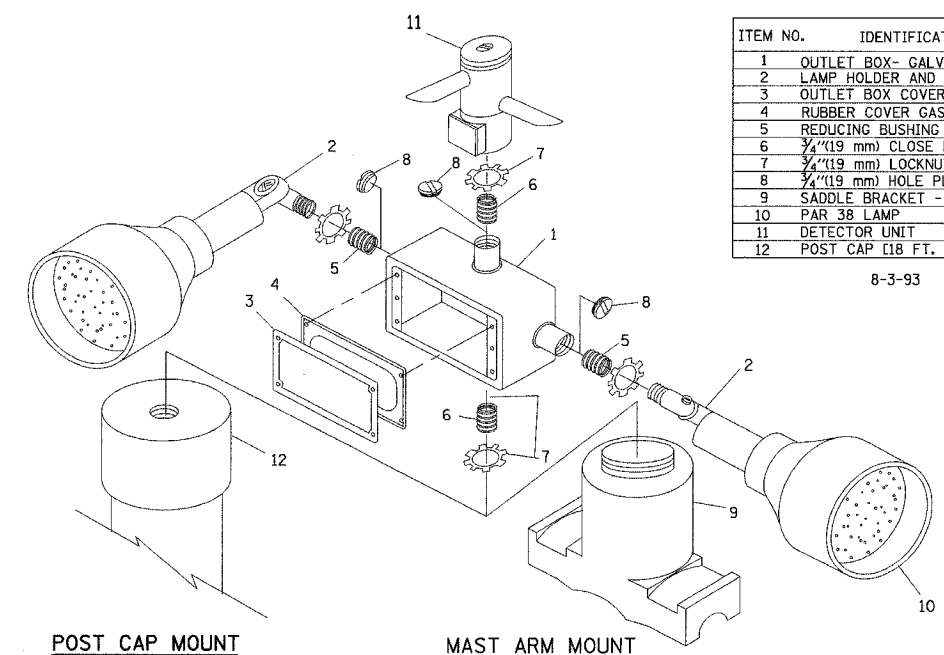
VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MODIFY EXISTING TYPE "D" FOUNDATION

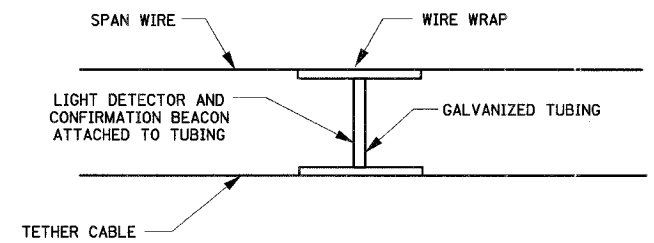


ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0.00344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

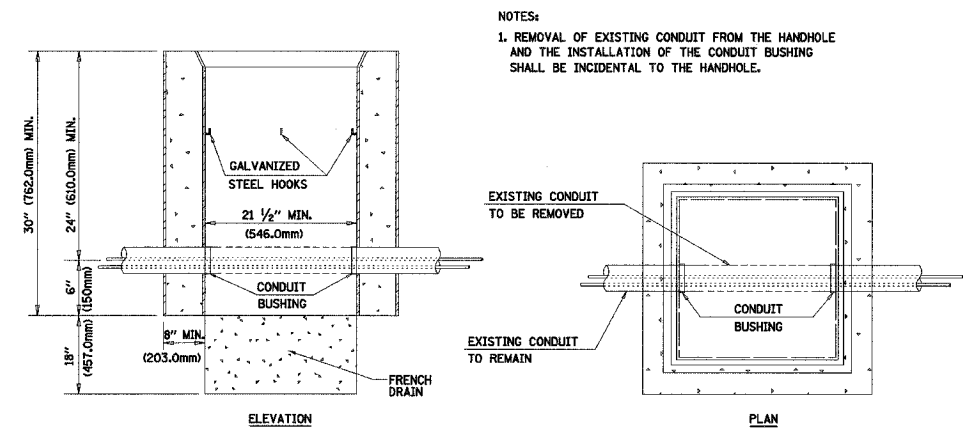
8-3-93

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)

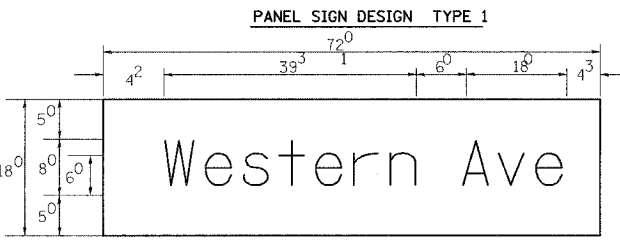


DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

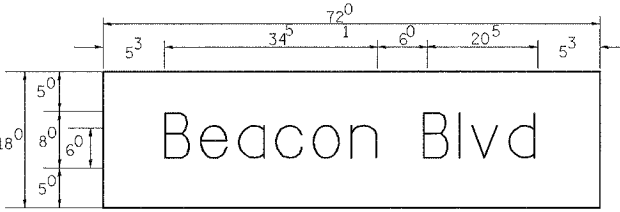
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STANDARD TRAFFIC SIGNAL DESIGN DETAILS
 SCALE: VERT. NOT TO SCALE
 HORIZ. NOT TO SCALE
 DATE: 5/17/2007
 DRAWN BY: JLA
 DESIGNED BY: KK/BPT
 CHECKED BY: JTL/BPT

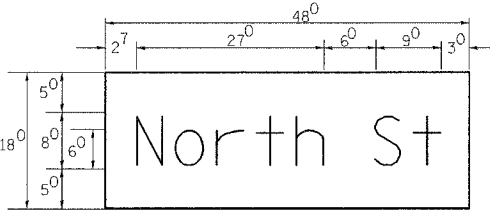
PREPARED BY:
CEMCON I-4
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9676 630-593-9199
 E-Mail: info@cemcon.com Website: www.cemcon.com



___ Sq. M. each
 9.0 Sq. Ft. each
 2 Required
 Design Series D



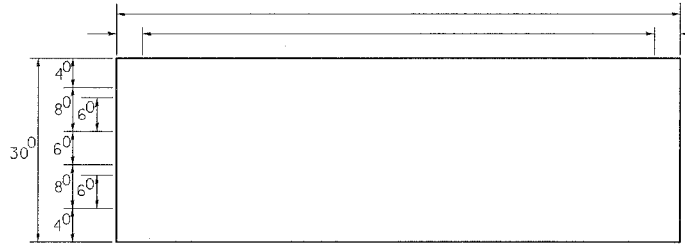
___ Sq. M. each
 9.0 Sq. Ft. each
 2 Required
 Design Series D



___ Sq. M. each
 6 Sq. Ft. each
 2 Required
 Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2

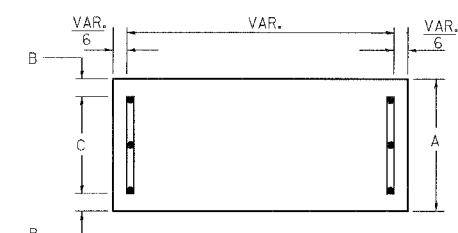


___ Sq. M. each
 ___ Sq. Ft. each
 ___ Required
 Design Series ___

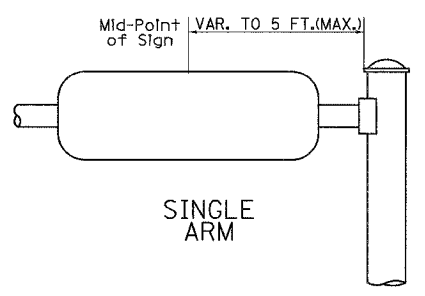
GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
 - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
 - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
 - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
 - SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:
 - * A.K.T. CORPORATION, SCHALMBURG, IL
 - * TUCKER COMPANY, INC., WAUWATOSA, WI
 - * AMERICAN FABRICATION CO., CHICAGO HEIGHTS, IL
 - * WESTERN TRAFFIC CONTROL INC., CICERO, IL
- PARTS LISTING:
 SIGN CHANNEL: PART #HPN053 (MED. CHANNEL)
 SIGN SCREWS: 1/4" x 14 x 1" H.W.H. #3
 SELF TAPPING WITH NEOPRENE WASHER
 BRACKETS: PART #HPN034 (UNIVERSAL)
 CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
 OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.

SUPPORTING CHANNELS

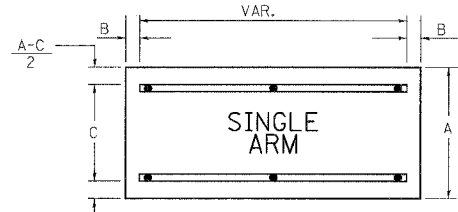


A	B	C
18"	2"	14"

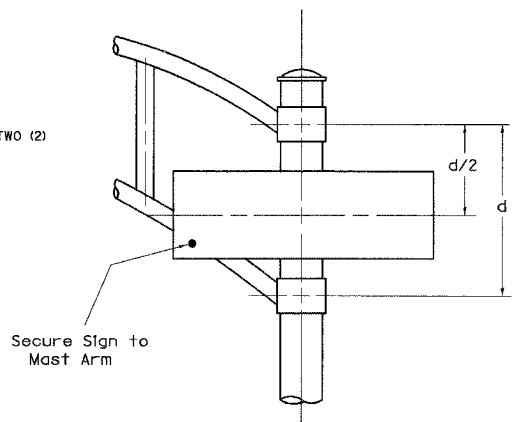


SINGLE ARM

SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



DUAL ARM

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM
 Shall be used. See Note #5.

Upper Case To Lower Case
 Spacing Chart 8-6 Inch Series "C & D"

EXAMPLE, 2³ DENOTES 3/8"

FIRST LETTER	SECOND LETTER																	
	acde		goq		bhikl		mnprru		f w		J		s t		v y		x z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14	14	15
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17	14	15
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12	14	15
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12	14	15
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21	20	21

Lower Case To Lower Case
 Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER																	
	acde		goq		bhikl		mnprru		f w		J		s t		v y		x z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	16	17
l m n q u	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	16	17
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14

Number To Number
 Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	15	12	14	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²				
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²				
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹				
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²				
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²				
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶				
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²				
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²				
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹				
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²				
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²				
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹				
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰				
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²				
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³				
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²				
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²				
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²				
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²				
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²				
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²				
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷				
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴				
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹				
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³				
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³				













NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

REVISIONS		DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE		

SCALE: VERT. NOT TO SCALE
 HORIZ. DATE 5/17/2007
 DRAWN BY JLA
 DESIGNED BY KK/BPT
 CHECKED BY JTL/BPT

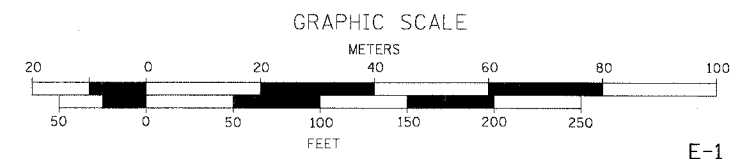
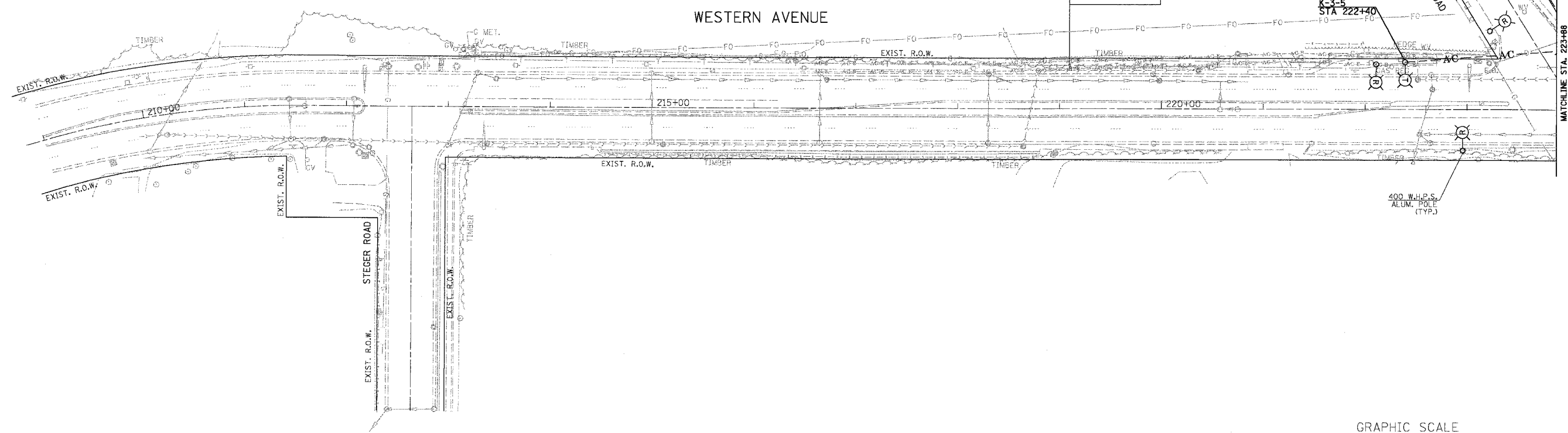
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	145	125
STA. 208+82		TO STA. 223+88		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

-  EXISTING LIGHTING CONTROLLER, SINGLE DOOR
-  EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
-  EXISTING ELECTRIC UTILITY POLE
-  EXISTING LIGHTING UNIT TO BE REMOVED
-  TEMPORARY SINGLE ARM LIGHTING UNIT 50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12' BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
-  TEMPORARY AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
-  UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
-  40' WOOD POLE
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION

GENERAL NOTES:

1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND NOTIFY ENGINEERS OF ANY DISCREPANCY IN EXISTING CONDITIONS.
2. CONTRACTOR SHALL OBTAIN PERMITS AND PAY ANY REQUIRED FEES AS REQUIRED BY IDOT, THE CITY OF CHICAGO HEIGHTS, AND THE VILLAGE OF PARK FOREST.
3. CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES FOR PHASE RELATED WORK AND INVOLVED UTILITY SERVICES PRIOR TO BEGINNING OF DEMOLITION AND/OR NEW CONSTRUCTION WITHIN THE PROJECT LIMITS.
4. CONTRACTOR TO COORDINATE WITH COMED FOR SAFE WORKING DISTANCE DURING PLACEMENT OF TEMPORARY AND PERMANENT LIGHT POLES AND AERIAL CABLE NEAR EXISTING OVERHEAD WIRES.
5. CONTRACTOR TO COORDINATE WITH COMED FOR INSTALLATION OF NEW ELECTRICAL SERVICES, CONTACT AT COMED IS:
JERRY NISSEN
GENERAL SERVICE REP
COMED
25000 GOVERNOR'S HIGHWAY
UNIVERSITY PARK, IL 60466
708-235-2340
6. PRIOR TO THE INSTALLATION OF ANY NEW WORK, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UNDERGROUND UTILITIES.
7. DISRUPTION TO ANY FUNCTIONAL LIGHTING SYSTEM, PUBLIC OR PRIVATE, IN THE VICINITY OF THE PROJECT DUE TO THE CONTRACTOR'S OPERATIONS SHALL NOT BE ACCEPTED WITHOUT ANY TEMPORARY OR PERMANENT LIGHTING SYSTEM IN PLACE AND OPERATIONAL. ANY LIGHTING SYSTEM THAT DOES NOT REQUIRE REMOVAL SHALL BE MAINTAINED THROUGHOUT THE PROJECT DURATION.
8. NEW LIGHTING, POWER AND CONTROL SYSTEM'S WIRING SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE 2007 IDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, NEC, AND LOCAL CODE. INSTALLATION SHALL MEET ALL APPLICABLE CODES AND STANDARDS OF THE AUTHORITY HAVING JURISDICTIONS AT NO ADDITIONAL COST TO THE OWNER.
9. ALL NEW CABLE DUCT, CONDUIT, AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY. PRIOR TO ANY FIELD ADJUSTMENT OF POLE PLACEMENT AND/OR CABLE ROUTING, OBTAIN APPROVAL FROM THE ENGINEER.
10. ALL OF THE ELECTRICAL MATERIALS SHALL BE NEW AND AS A MINIMUM THE FOLLOWING STANDARDS SHALL APPLY TO THE CONSTRUCTION OF ROADWAY LIGHTING:
IDOT STANDARDS FOR ROADWAY LIGHTING
AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING, ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA
NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NATIONAL ELECTRICAL SAFETY CODE, INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
ROADWAY LIGHTING DESIGN GUIDE, AMERICAN ASSOC. OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS
OSHA, ELECTRICAL SYSTEMS
UNDERWRITERS LABORATORIES
AMERICAN NATIONAL STANDARD INSTITUTE
INSULATED CABLE ENGINEERS ASSOCIATION
11. MULTI-CABLE DUCT RUNS ARE TO BE INSTALLED IN A COMMON TRENCH AND BACKFILLED. WHERE MULTIPLE CABLE DUCTS OR CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACK FILL WILL NOT BE PAID FOR EACH CABLE DUCT OR CONDUIT BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
12. ALL PITS USED FOR INSTALLED PUSHED (JACKED) CASING UNDER EXISTING ROADWAYS SHALL BE LOCATED FIVE (5) FOOT MINIMUM CLEAR FROM THE EDGE OF THE SHOULDER. LOCATIONS OF THE CONDUIT CROSSING SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO MEET THE MINIMUM CLEARANCE REQUIREMENTS. THE PITS MUST BE ADEQUATELY GUARDED TO PROTECT THE MOTORIST.
13. LUMINAIRES MUST BE INSTALLED ON LIGHT STANDARDS BASE WITHIN A MAXIMUM OF 48 HOURS AFTER LIGHT STANDARD IS ERECTED.
14. ALL SPLICES NECESSARY FOR A COMPLETE AND OPERATIONAL LIGHTING CIRCUIT SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM FOR UNIT DUCT, OF THE TYPE SPECIFIED ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
15. THE CONTRACTOR SHALL VERIFY ALL OF THE DATA SHOWN ON THE CONTRACT PLANS AND REFERENCE DRAWINGS WHICH WOULD AFFECT HIS WORK UNDER THIS CONTRACT AND THE OPERATION OF THE EXISTING ROADWAY LIGHTING AND SIGN LIGHTING SYSTEMS.
16. ALL LIGHT STANDARDS SHALL BE ORIENTED PERPENDICULAR TO THE CURB (90°) UNLESS OTHERWISE NOTED.
17. ALL UNIT DUCT FOR THE PURPOSES OF TEMPORARY WIRING SHALL BE TIN COATED COPPER.



E-1

PLOT DATE = 5/18/2007
PLOT SCALE = AS SHOWN
USER NAME = KUSE18



EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
400 WEST FULTON STREET CHICAGO, ILLINOIS 60661-1990
TEL: 312-884-9100 FAX: 312-889-1017 WWW.EPSTEIN-IL.COM
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
DEMOLITION, TEMPORARY
LIGHTING AND ELECTRICAL
SERVICE PLAN**

SCALE: 1" = 50'
DATE: 1/7/07

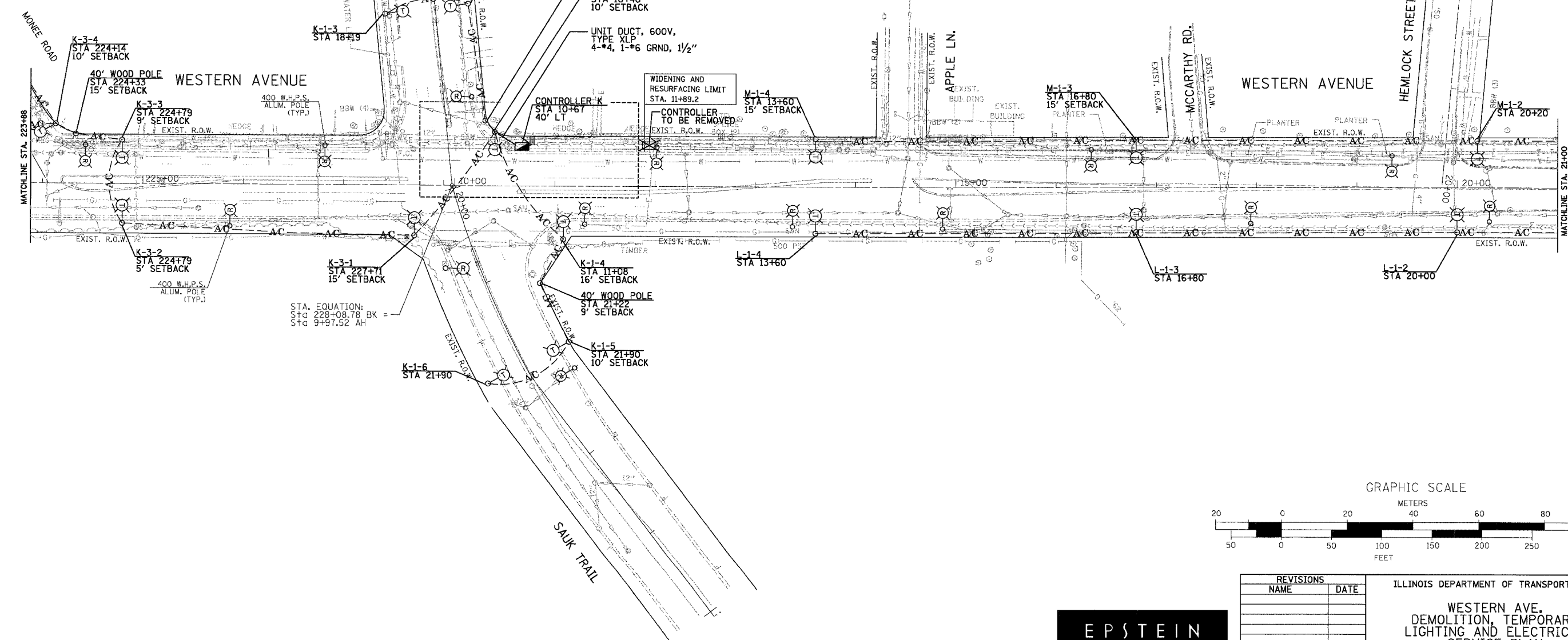
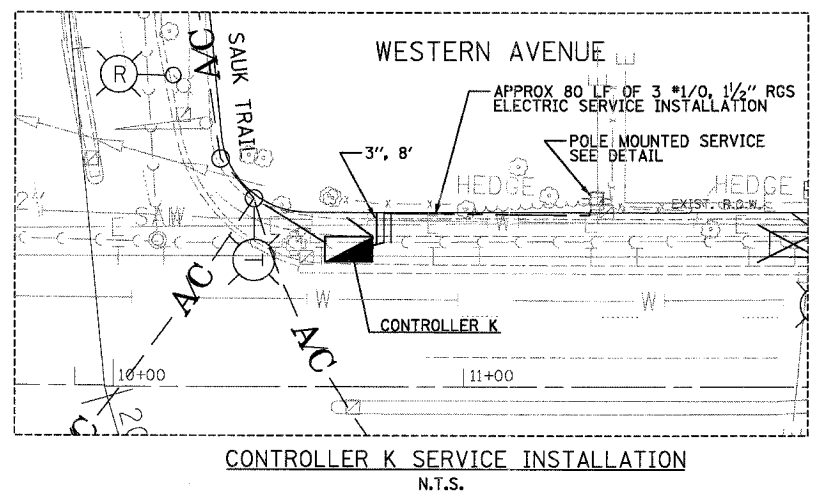
DRAWN BY: A.P.
CHECKED BY: G.A.O.

Applies to E-1 thru E-27

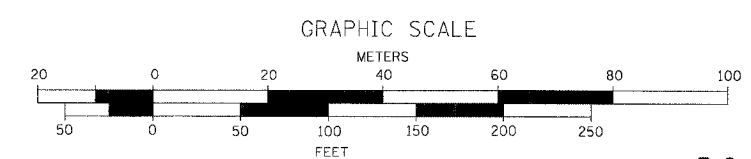
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2845	3152 WRS	COOK	145	126
STA. 223+88		TO STA. 21+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

LEGEND:

- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT
50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12' BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION



STA. EQUATION:
Sta 228+08.78 BK =
Sta 9+97.52 AH



E-2

REVISIONS	
NAME	DATE

EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
600 WEST FULLTON STREET CHICAGO, ILLINOIS 60661-1188
T: 312-461-0100 F: 312-368-1217 www.epstein-esi.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

ILLINOIS DEPARTMENT OF TRANSPORTATION
**WESTERN AVE.
DEMOLITION, TEMPORARY
LIGHTING AND ELECTRICAL
SERVICE PLAN**

SCALE: 1" = 50'
DATE: 1/7/07
DRAWN BY: A.P.
CHECKED BY: G.A.O.

PLOT DATE = 5/14/2007
FILE NAME = WFLLEL
PLOT NAME = WFLLEL
USER NAME = MUSEV

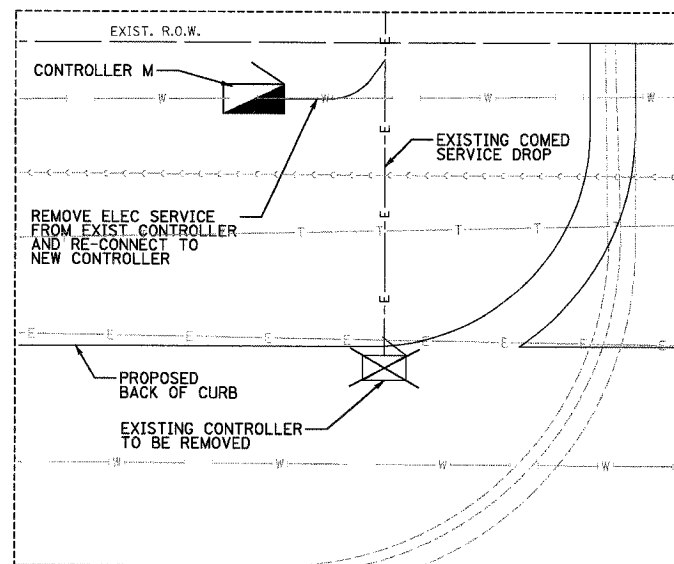
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2845	3152 WRS	COOK	145	127
STA. 21+00		TO STA. 36+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

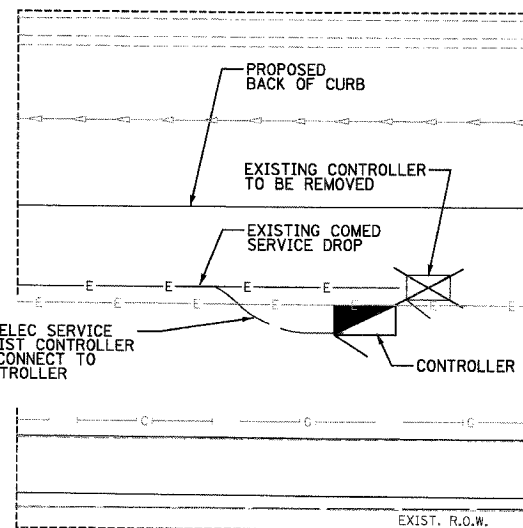
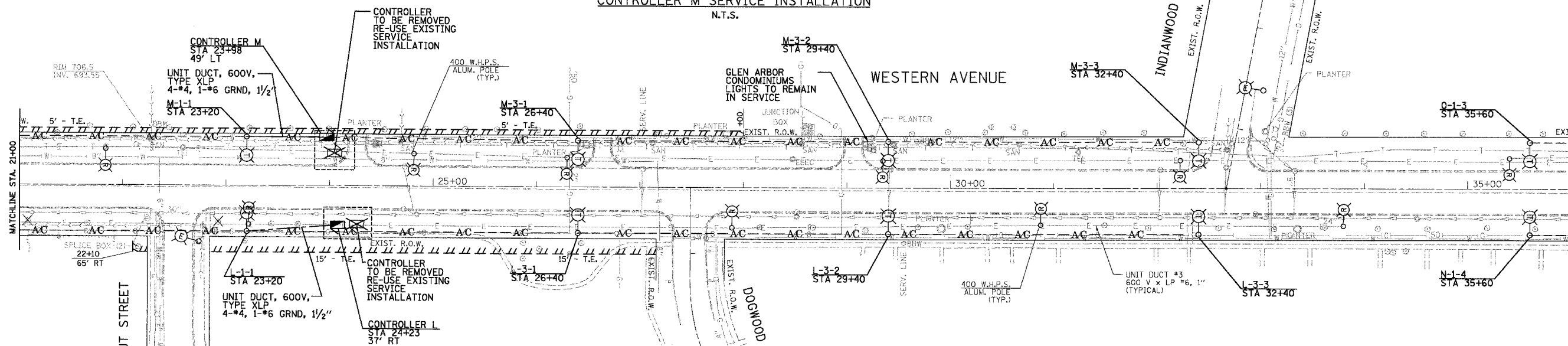
- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT 50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12' BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION

SERVICE INSTALLATION NOTES:

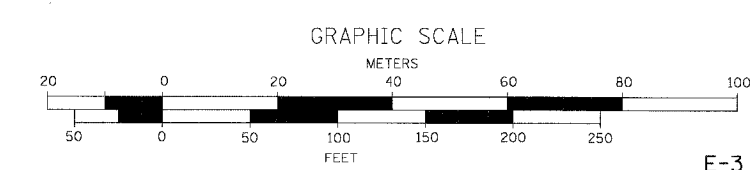
1. CONTRACTOR TO VERIFY ACTUAL COMED SERVICE DROP LOCATIONS PRIOR TO STARTING WORK.
2. LOCATION OF CONTROLLER IS SHOWN GRAPHICALLY, FINAL LOCATIONS SHALL BE ACCORDING TO COMED SERVICE DROP AND OTHER UTILITY LOCATIONS. CONTRACTOR TO VERIFY LOCATION WITH ENGINEER PRIOR TO STARTING WORK.



CONTROLLER M SERVICE INSTALLATION
N.T.S.



CONTROLLER L SERVICE INSTALLATION
N.T.S.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
WESTERN AVE. DEMOLITION, TEMPORARY LIGHTING AND ELECTRICAL SERVICE PLAN
SCALE: 1" = 50'
DATE: 1/7/07
DRAWN BY: A.P.
CHECKED BY: G.A.O.



PLOT DATE = 5/18/2007
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
USER NAME = #USER#

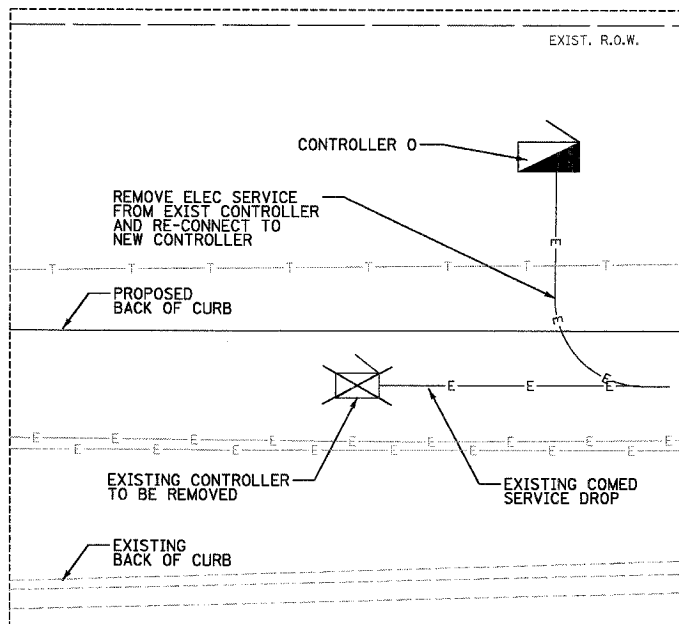
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2845	3152 WRS	COOK	195	128
STA. 36+00		TO STA. 51+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT 50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12" BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION

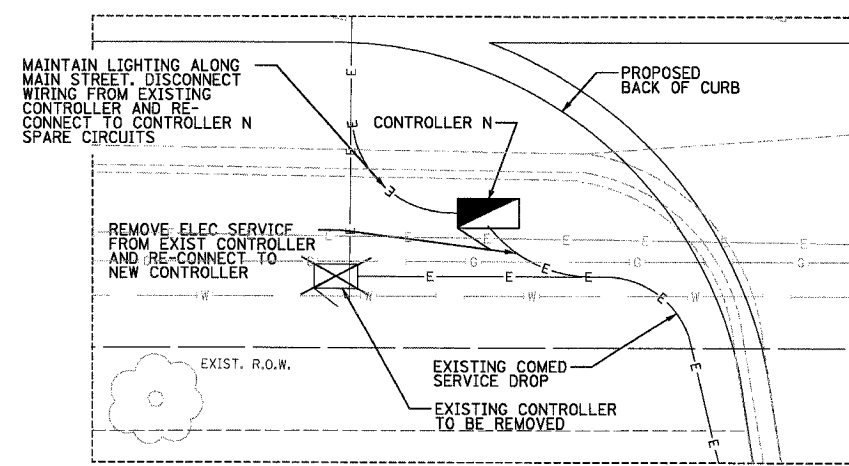
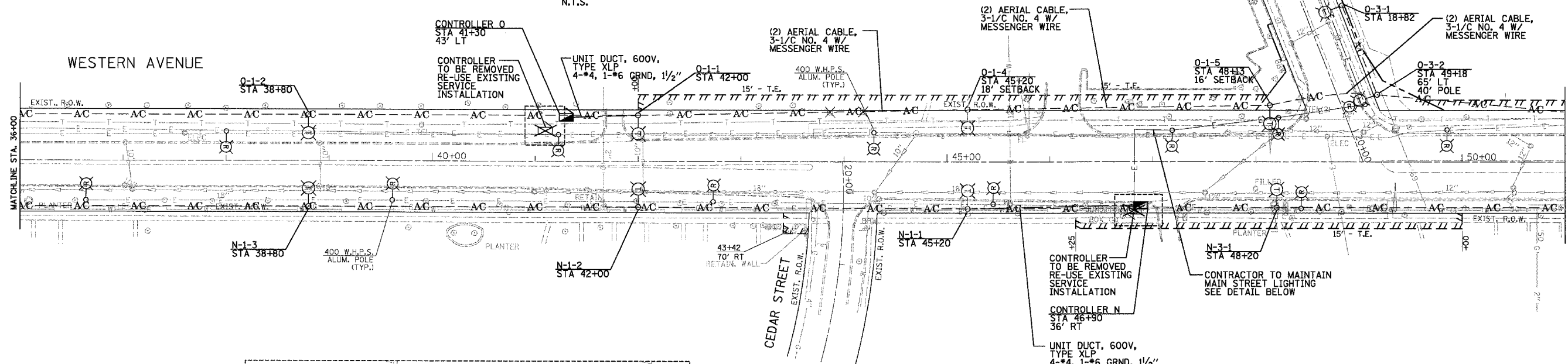
SERVICE INSTALLATION NOTES:

- CONTRACTOR TO VERIFY ACTUAL COMED SERVICE DROP LOCATIONS PRIOR TO STARTING WORK.
- LOCATION OF CONTROLLER IS SHOWN GRAPHICALLY. FINAL LOCATIONS SHALL BE ACCORDING TO COMED SERVICE DROP AND OTHER UTILITY LOCATIONS. CONTRACTOR TO VERIFY LOCATION WITH ENGINEER PRIOR TO STARTING WORK.



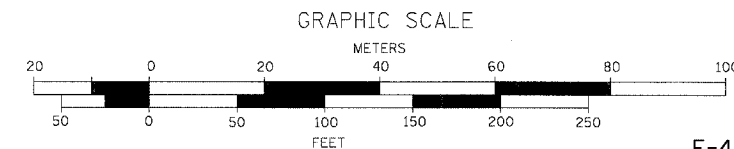
CONTROLLER O SERVICE INSTALLATION

N.T.S.



CONTROLLER N SERVICE INSTALLATION

N.T.S.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE. DEMOLITION, TEMPORARY LIGHTING AND ELECTRICAL SERVICE PLAN

SCALE: 1" = 50'

DATE: 1/7/07

DRAWN BY: A.P.

CHECKED BY: G.A.O.

EPSTEIN

A. EPSTEIN AND SONS INTERNATIONAL, INC.
 500 WEST FULTON STREET CHICAGO, ILLINOIS 60661-1189
 T: 312-454-8190 F: 312-558-1217 www.epstein-il.com
 CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/15/2007
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 PLOT SCALE = #SCALE#
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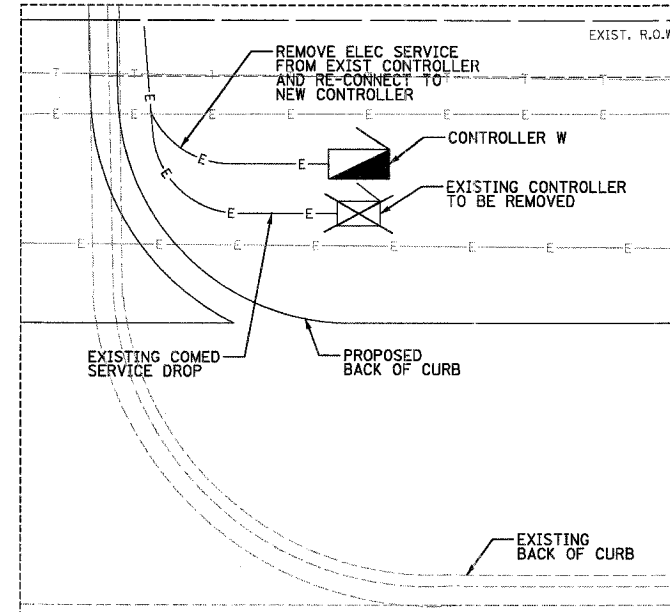
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2845	3152 WRS	COOK	129	129
STA. 51+00		TO STA. 66+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

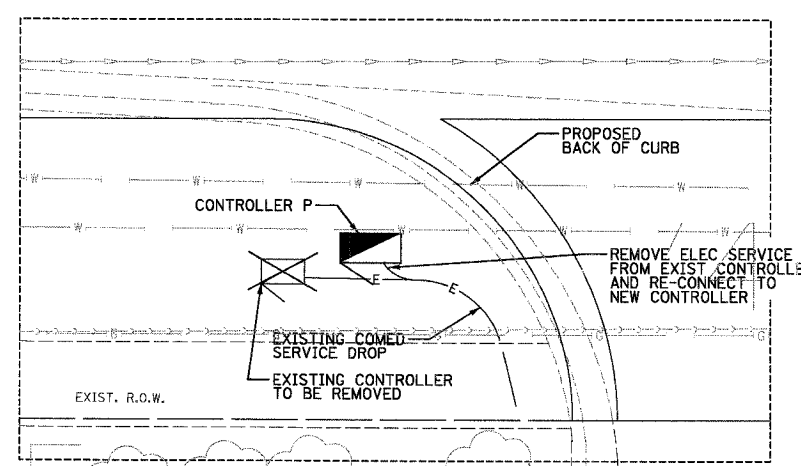
- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT
50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12" BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/4 NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION

SERVICE INSTALLATION NOTES:

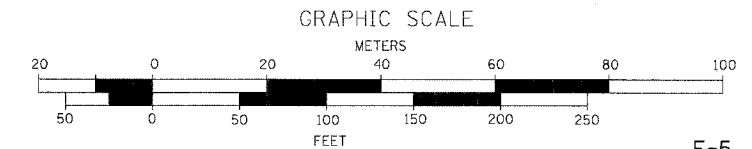
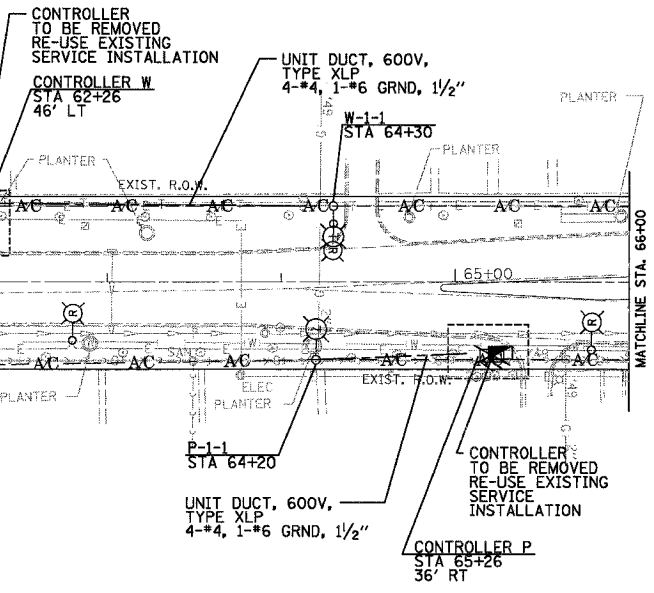
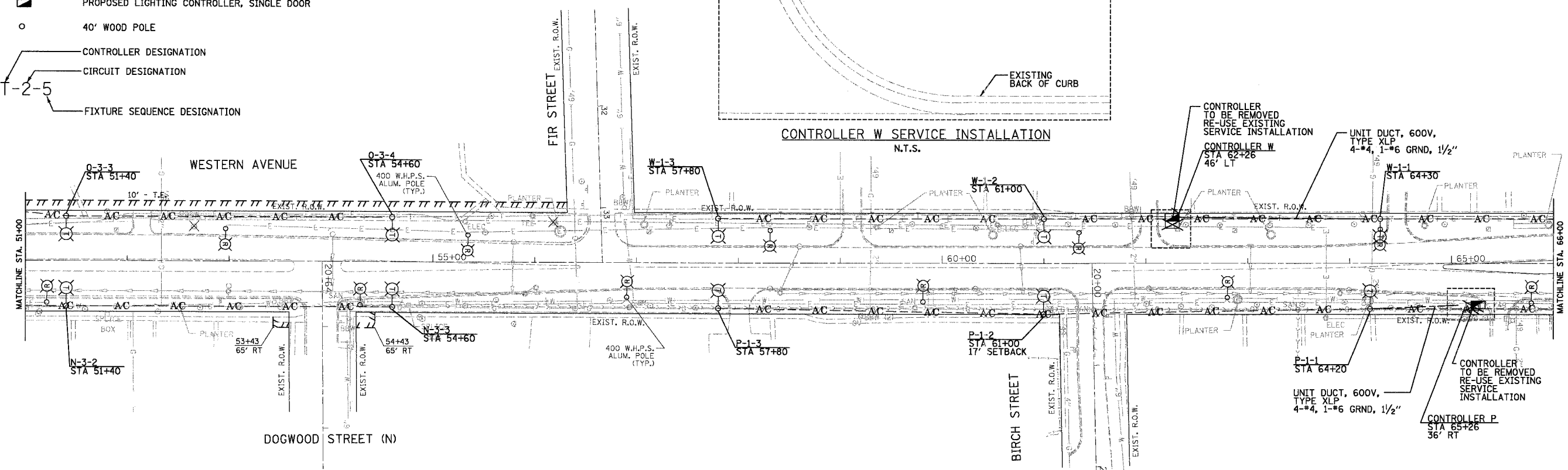
- CONTRACTOR TO VERIFY ACTUAL COMED SERVICE DROP LOCATIONS PRIOR TO STARTING WORK.
- LOCATION OF CONTROLLER IS SHOWN GRAPHICALLY, FINAL LOCATIONS SHALL BE ACCORDING TO COMED SERVICE DROP AND OTHER UTILITY LOCATIONS. CONTRACTOR TO VERIFY LOCATION WITH ENGINEER PRIOR TO STARTING WORK.



CONTROLLER W SERVICE INSTALLATION
N.T.S.



CONTROLLER P SERVICE INSTALLATION
N.T.S.



E-5

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE.
DEMOLITION, TEMPORARY
LIGHTING AND ELECTRICAL
SERVICE PLAN

SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.

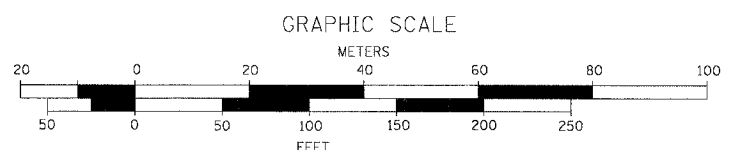
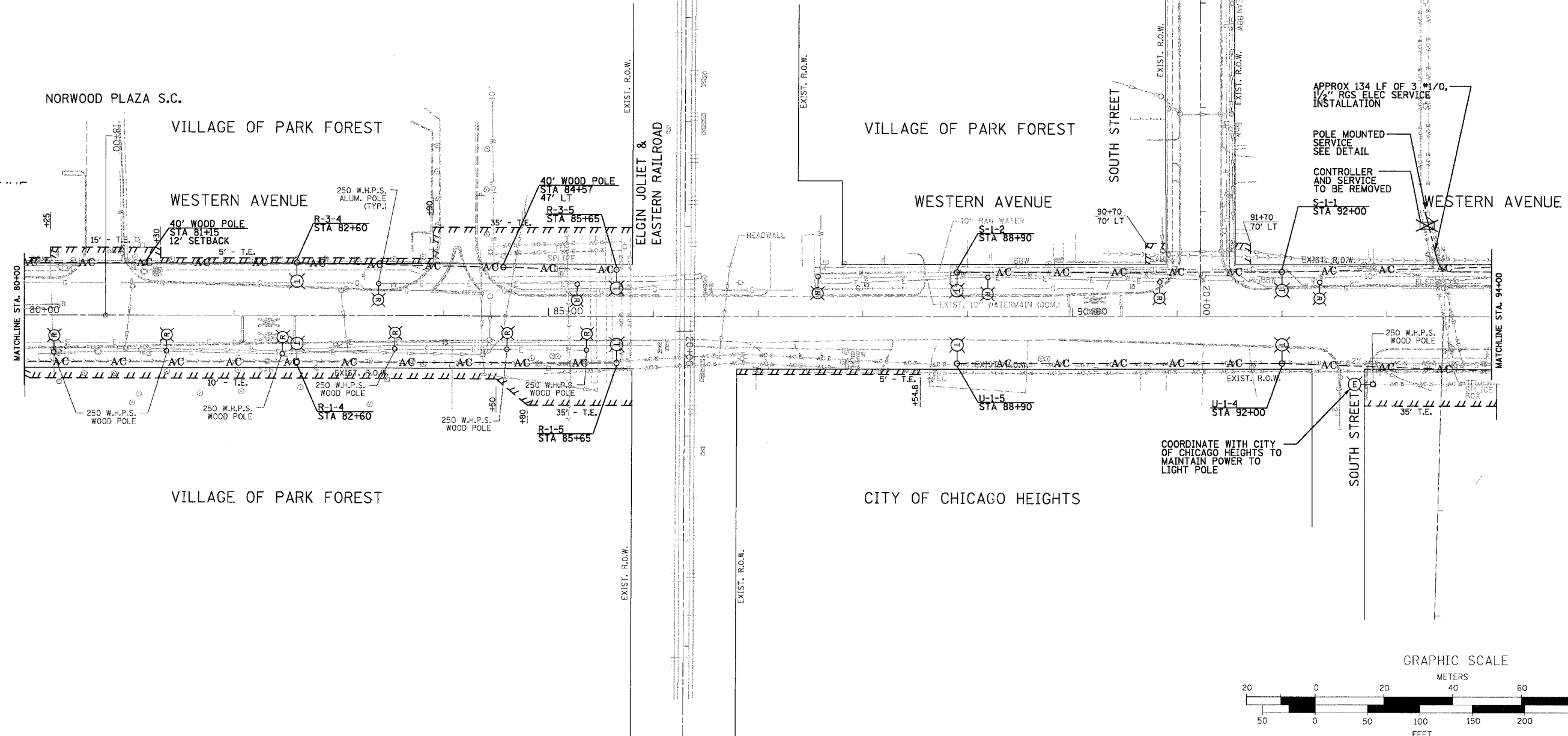
EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
400 WEST FULTON STREET CHICAGO, ILLINOIS 60661-1199
TEL: 312-484-9500 FAX: 312-484-1277 WWW.EPSTEIN-ESI.COM
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/18/2007
FILE NAME = FILEL0
PLOT SCALE = NSCALE0
USER NAME = MUSERV

CONTRACT NO. 62742			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
2845	3152 WRS	COOK	141 131
STA. 80+00		TO STA. 94+00	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

LEGEND:

- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT 50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12' BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/2 NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION



E-7

PLOT DATE = 5/15/2007
 FILE NAME = #FILE#
 USER NAME = #USER#

EPSTEIN

A. EPSTEIN AND SONS INTERNATIONAL, INC.
 600 WEST FULTON STREET CHICAGO, ILLINOIS 60610-1188
 T: 312-464-9100 F: 312-559-1217 www.epstein-isi.com
 CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
 DEMOLITION, TEMPORARY
 LIGHTING AND ELECTRICAL
 SERVICE PLAN**

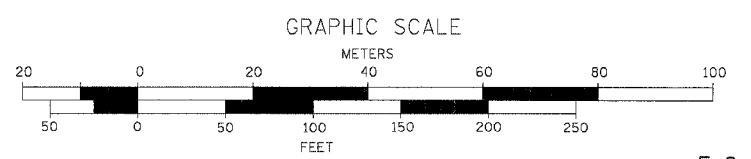
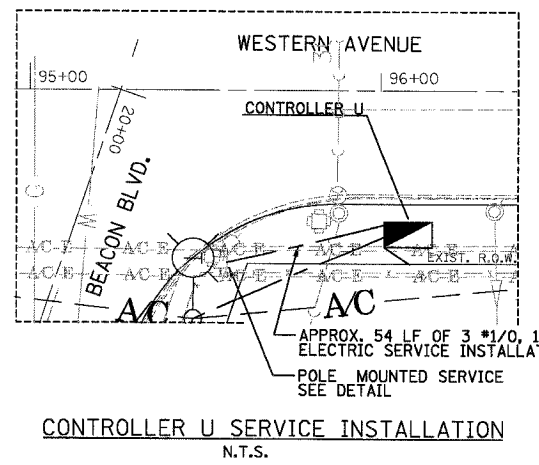
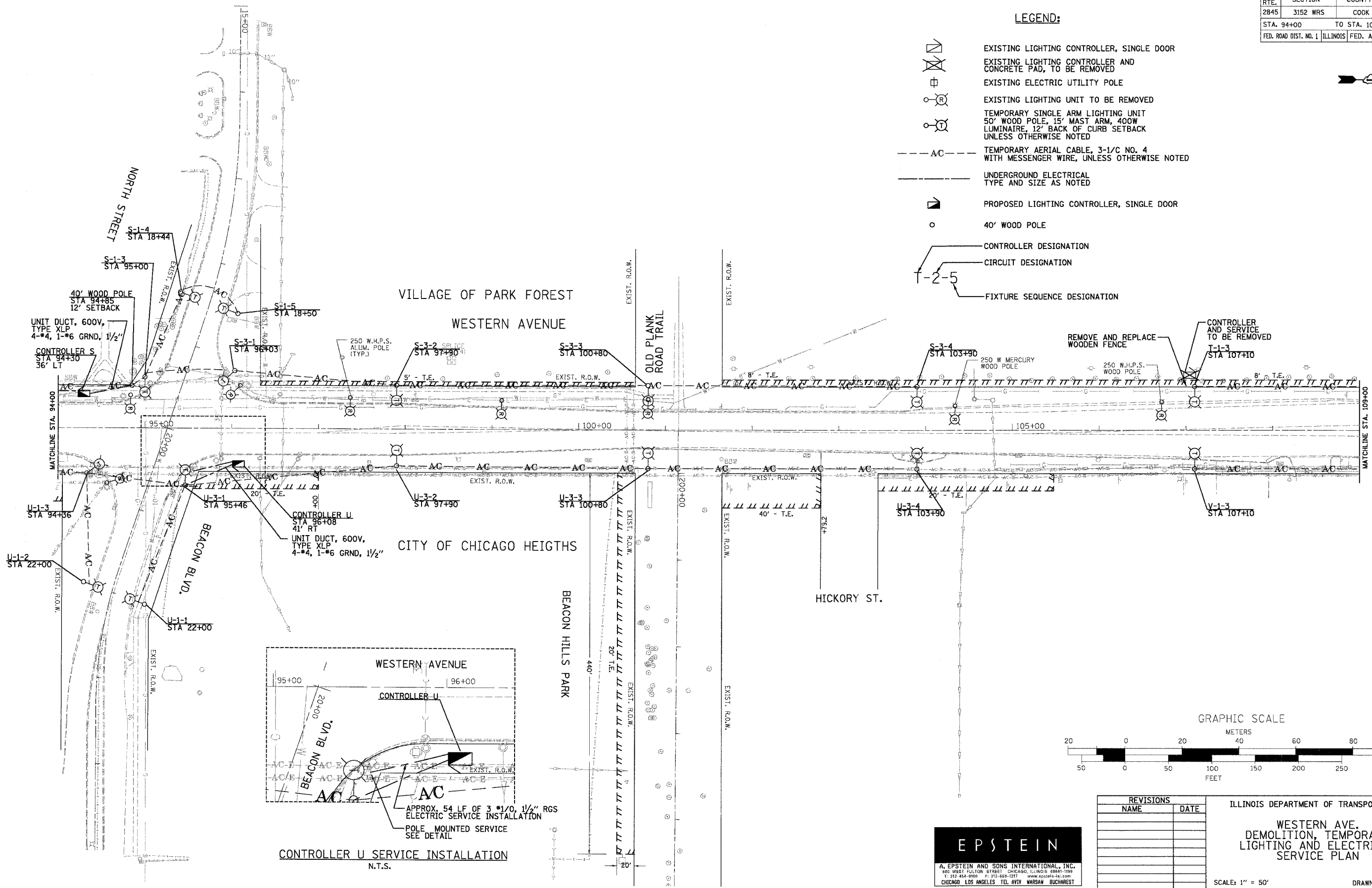
SCALE: 1" = 50'
 DATE: 1/7/07

DRAWN BY: A.P.
 CHECKED BY: G.A.O.

CONTRACT NO. 62742				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	145	132
STA. 94+00		TO STA. 109+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT
50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12" BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- AC --- TEMPORARY AERIAL CABLE, 3-1/8 NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**WESTERN AVE.
DEMOLITION, TEMPORARY
LIGHTING AND ELECTRICAL
SERVICE PLAN**



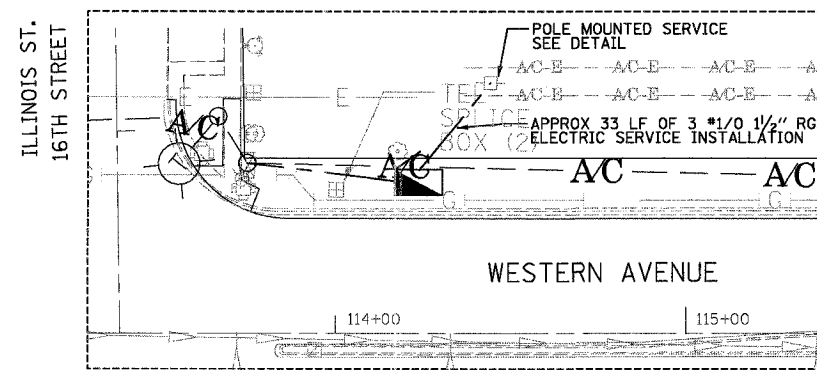
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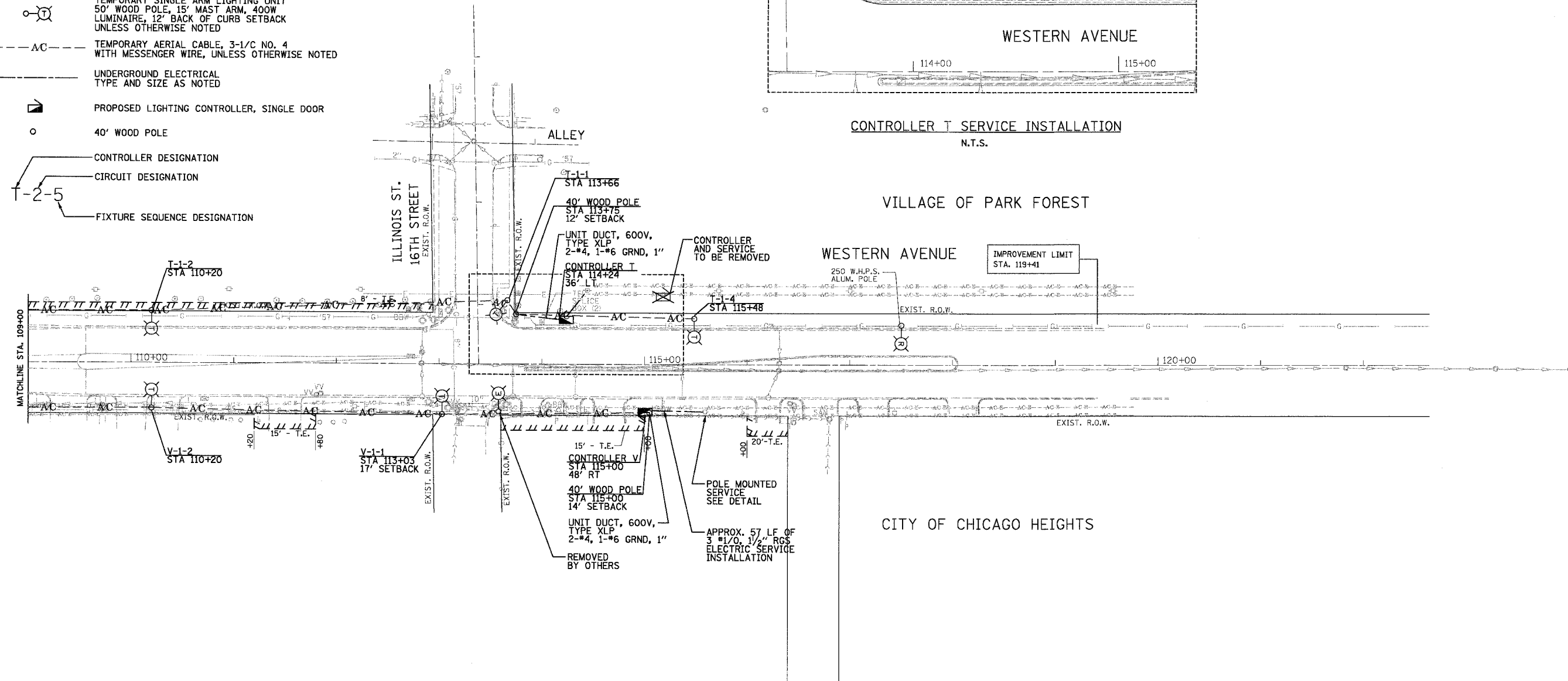
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2845	3152 WRS	COOK	192 133
STA. 109+00		TO STA. 119+41	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

LEGEND:

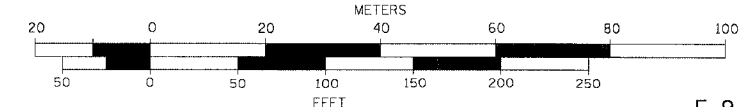
- EXISTING LIGHTING CONTROLLER, SINGLE DOOR
- EXISTING LIGHTING CONTROLLER AND CONCRETE PAD, TO BE REMOVED
- EXISTING ELECTRIC UTILITY POLE
- EXISTING LIGHTING UNIT TO BE REMOVED
- TEMPORARY SINGLE ARM LIGHTING UNIT
50' WOOD POLE, 15' MAST ARM, 400W LUMINAIRE, 12' BACK OF CURB SETBACK UNLESS OTHERWISE NOTED
- TEMPORARY AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UNDERGROUND ELECTRICAL TYPE AND SIZE AS NOTED
- PROPOSED LIGHTING CONTROLLER, SINGLE DOOR
- 40' WOOD POLE
- CONTROLLER DESIGNATION
- CIRCUIT DESIGNATION
- FIXTURE SEQUENCE DESIGNATION



CONTROLLER T SERVICE INSTALLATION
N.T.S.



GRAPHIC SCALE



E-9

EPSTEIN

A. EPSTEIN AND SONS INTERNATIONAL, INC.
600 WEST FULTON STREET CHICAGO, ILLINOIS 60611-1899
TEL: 312-454-9100 FAX: 312-454-1217 WWW.EPSTEIN-IL.COM
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
DEMOLITION, TEMPORARY
LIGHTING AND ELECTRICAL
SERVICE PLAN**








SCALE: 1" = 50'
DATE: 1/7/07

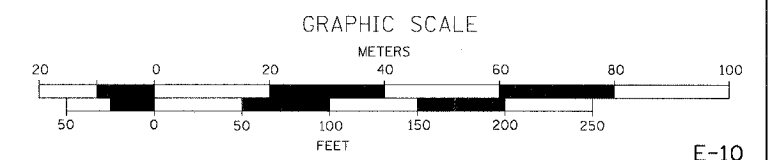
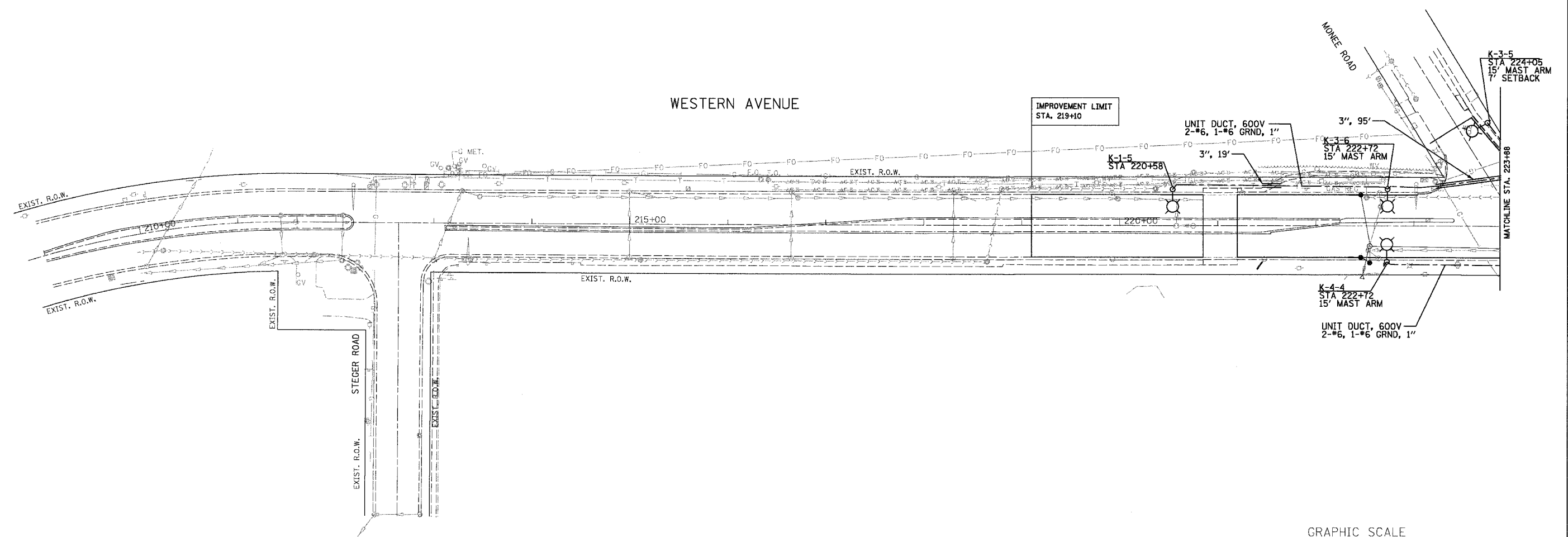
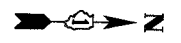
DRAWN BY: A.P.
CHECKED BY: G.A.O.

PLOT DATE = 5/18/2007
PLOT SCALE = 1" = 50'
PLOT USER = G.A.O.
USER NAME = G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	191	134
STA. 208+82		TO STA. 223+88		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
PROPOSED LIGHTING PLAN**

SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.





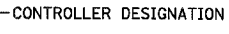
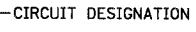

EPSTEIN

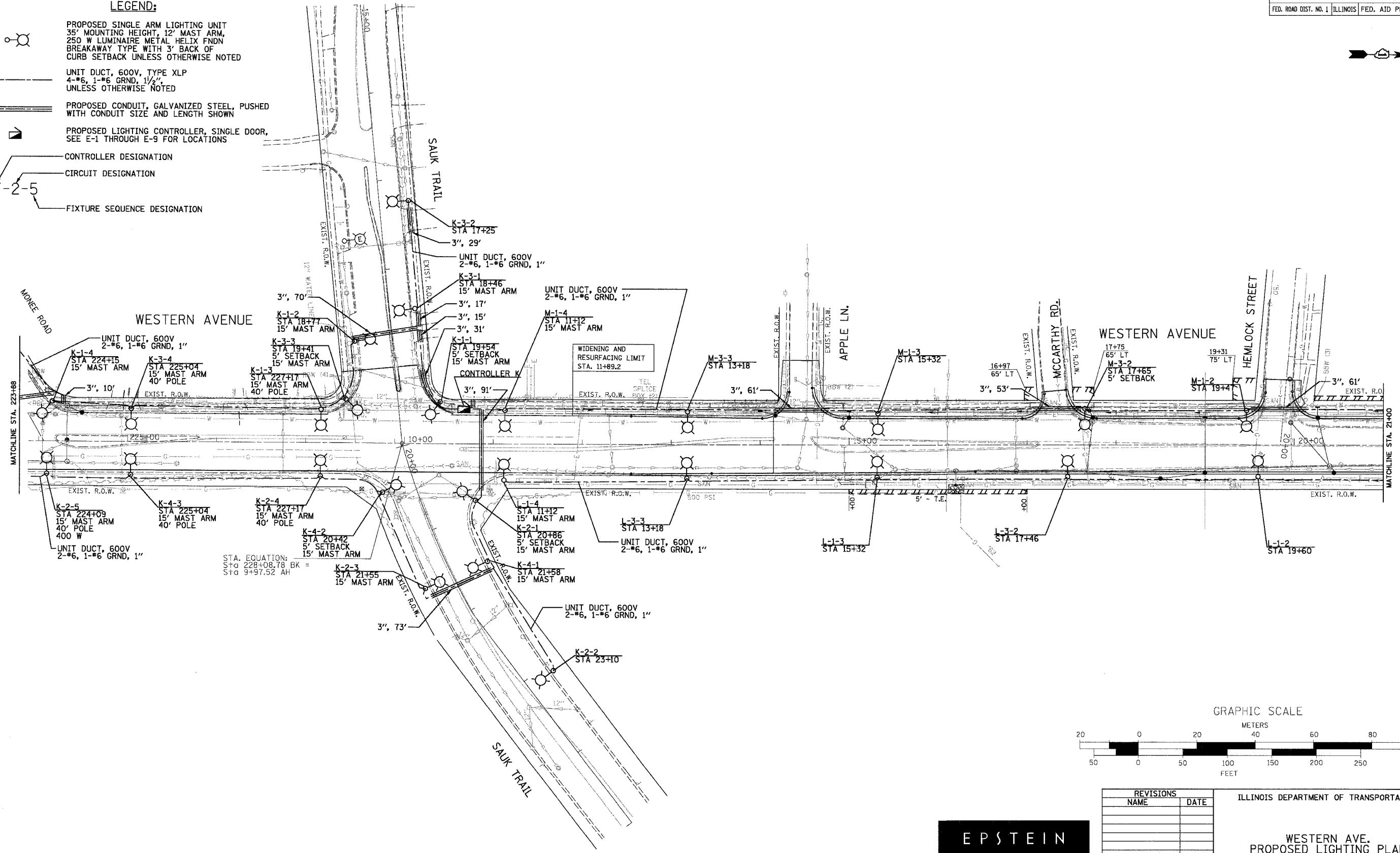
A. EPSTEIN AND SONS INTERNATIONAL, INC.
800 WEST FULTON STREET CHICAGO, ILLINOIS 60611-1899
T: 312-464-9100 F: 312-655-1217 www.epstein-si.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/18/2007
FILE NAME = WFILEL
USER SCALE = 1/8"=1'-0"
USER NAME = GIBBY

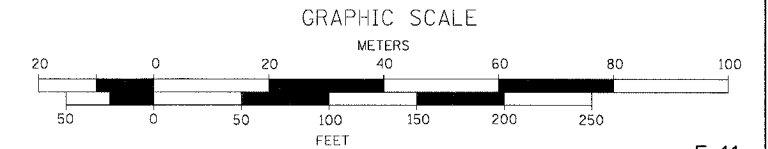
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	142	135
STA. 223+88		TO STA. 21+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



STA. EQUATION:
 CVC TO 228+08.78 BK =
 STD 9+97.52 AH



E-11

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
PROPOSED LIGHTING PLAN**

SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.



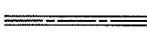




EPSTEIN

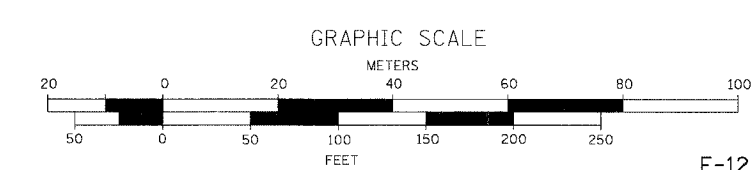
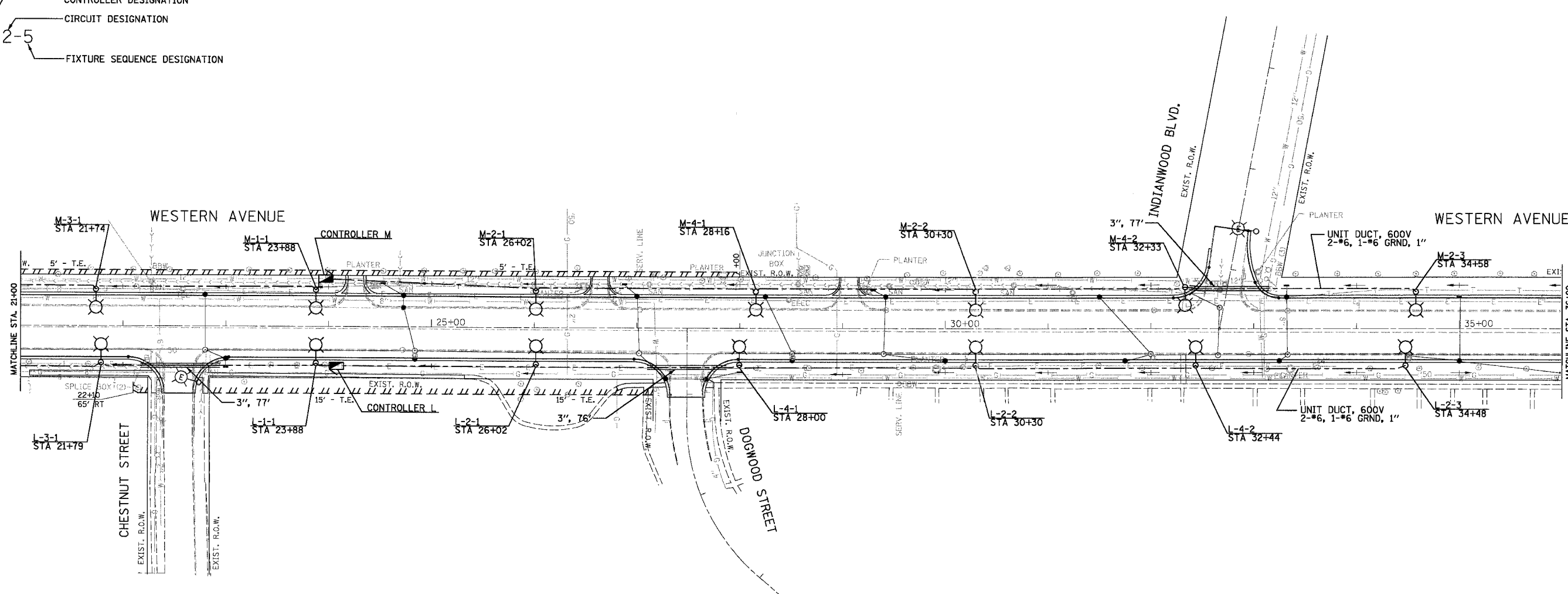
A. EPSTEIN AND SONS INTERNATIONAL, INC.
 400 WEST FULLTON STREET CHICAGO, ILLINOIS 60611-1190
 T: 312-464-3100 F: 312-659-1217 www.epstein-ill.com
 CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/18/2007
 FILE NAME = WFILE.
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = GIBERN

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	141	136
STA. 21+00		TO STA. 36+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



E-12

PLOT DATE = 5/19/2007
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
USER NAME = #USER#

EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
450 WEST FULTON STREET CHICAGO, ILLINOIS 60661-1169
T: 312-454-9100 F: 312-559-1917 www.epstein-ils.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION


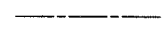
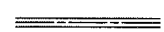




**WESTERN AVE.
PROPOSED LIGHTING PLAN**

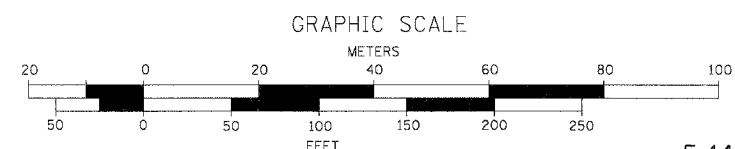
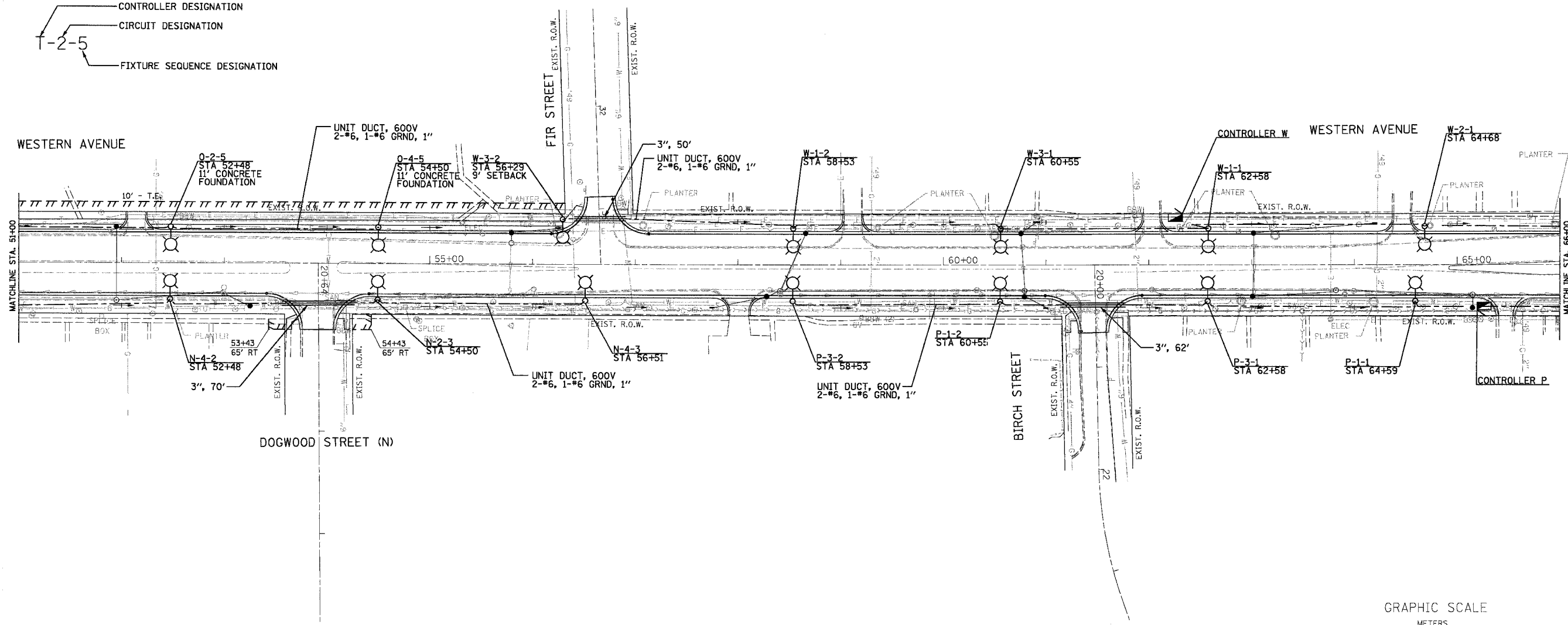
SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	121	129
STA. 51+00		TO STA. 66+00		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



E-14

PLOT DATE = 5/18/2007
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
USER NAME = #USER#



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION


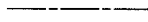


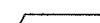
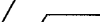

**WESTERN AVE.
PROPOSED LIGHTING PLAN**

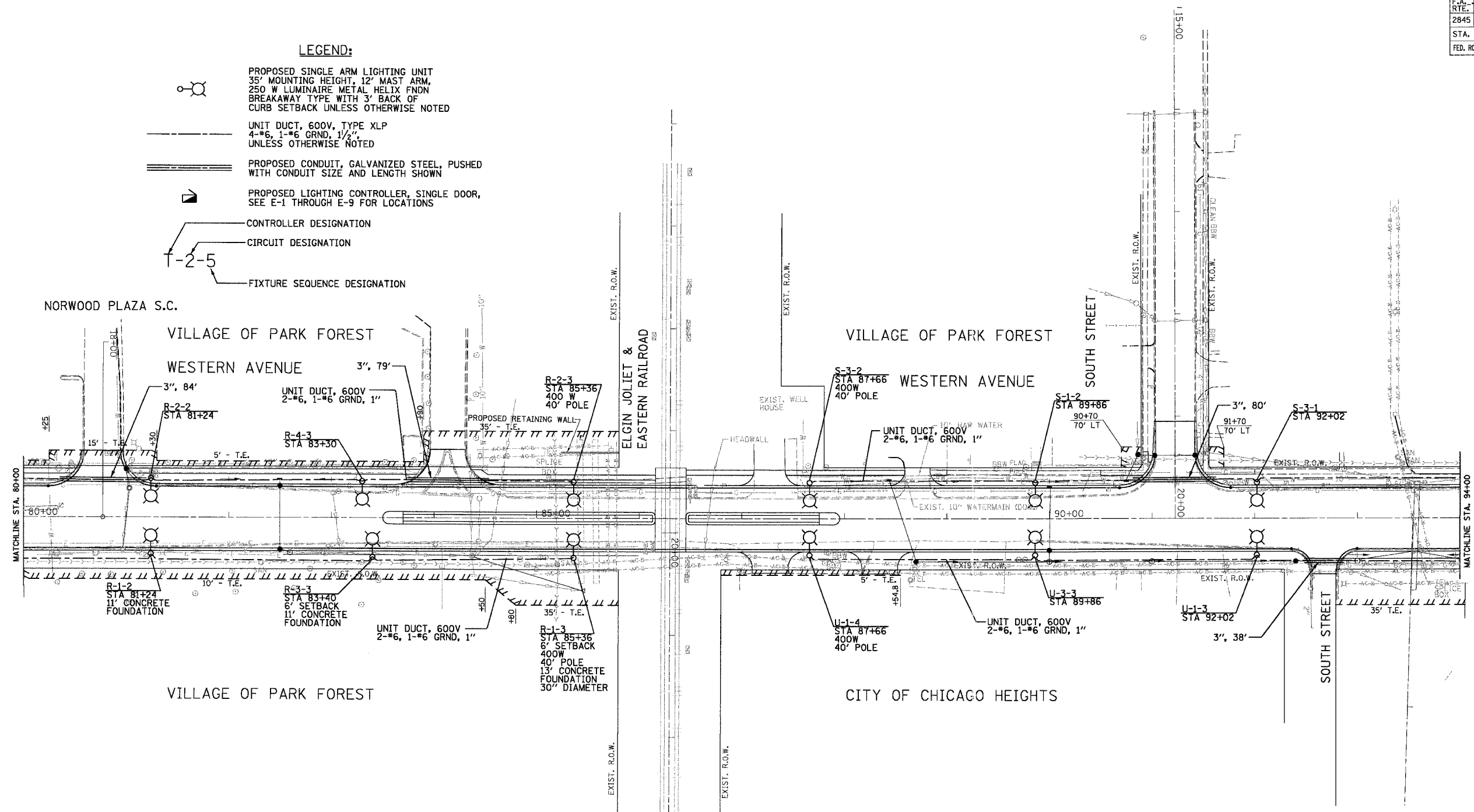
SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.

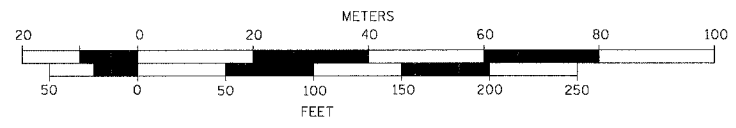
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2845	3152 WRS	COOK	195	140
STA. 80+00		TO STA. 94+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2"
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



GRAPHIC SCALE



E-16

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE.
PROPOSED LIGHTING PLAN

SCALE: 1" = 50'
DATE: 1/7/07


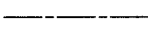



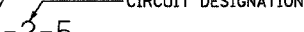
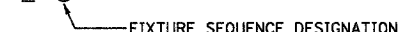
DRAWN BY: A.P.
CHECKED BY: G.A.O.

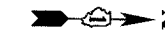
EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
800 WEST FULLON STREET CHICAGO, ILLINOIS 60607-1000
T: 312-454-9100 F: 312-859-1217 www.epstein-intl.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/19/2007
PLOT NAME = WESTERN AVE
PLOT NUMBER = 140
USER NAME = USER

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	141	141
STA. 94+00		TO STA. 109+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

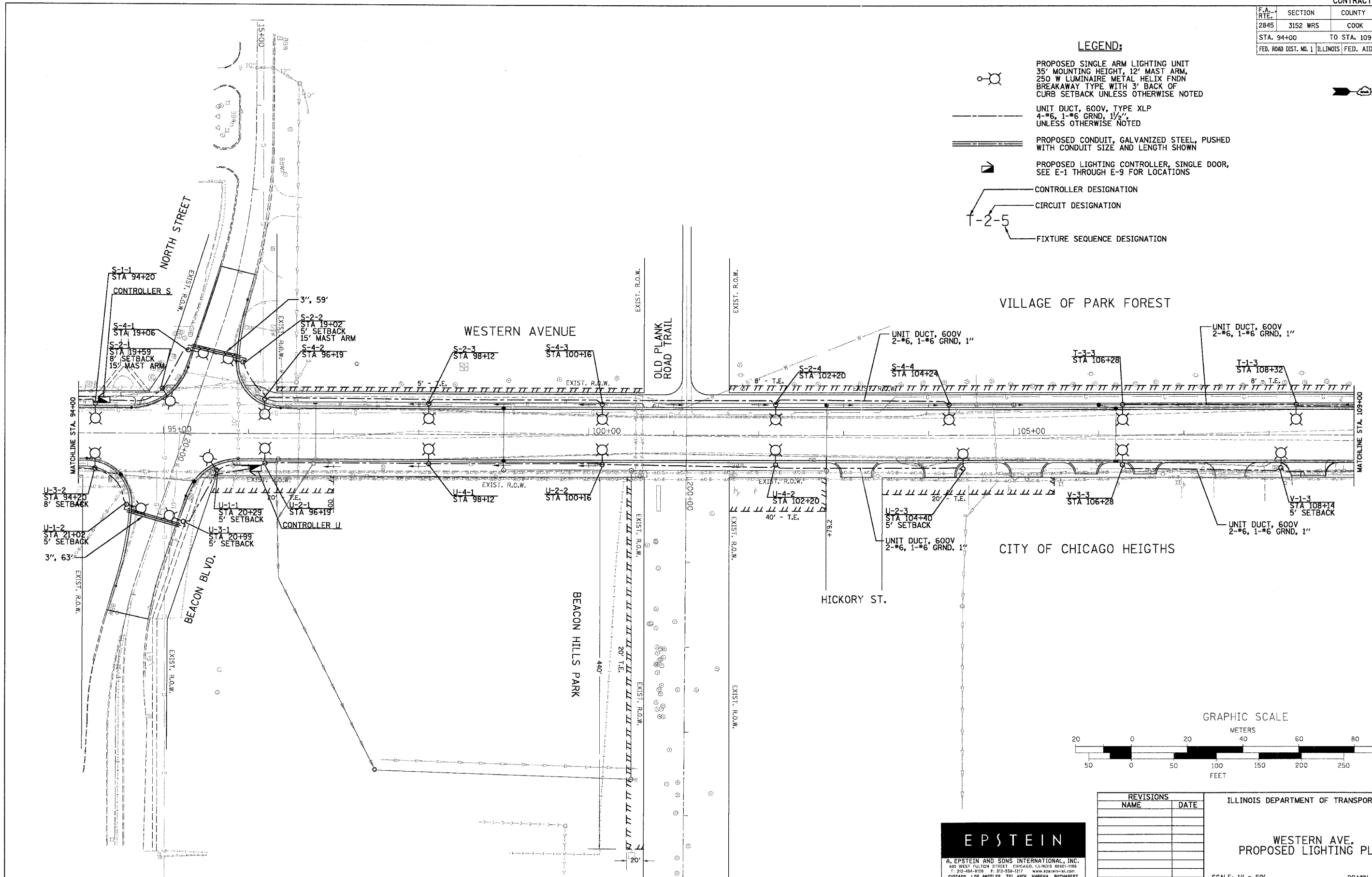
LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION

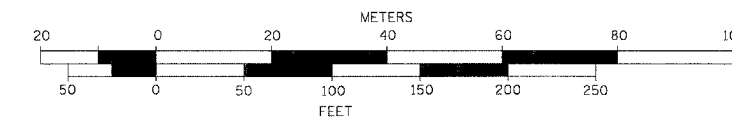


VILLAGE OF PARK FOREST

CITY OF CHICAGO HEIGHTS



GRAPHIC SCALE



E-17

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE.
PROPOSED LIGHTING PLAN

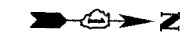
SCALE: 1" = 50'
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.








EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
900 WEST FULLON STREET CHICAGO, ILLINOIS 60607-1188
T: 312-454-9100 F: 312-559-1217 www.epstein-isi.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

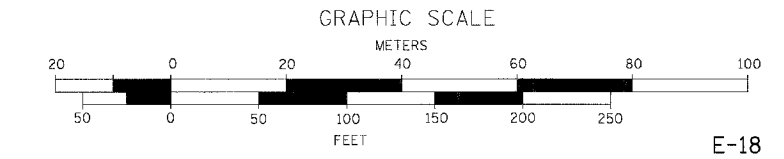
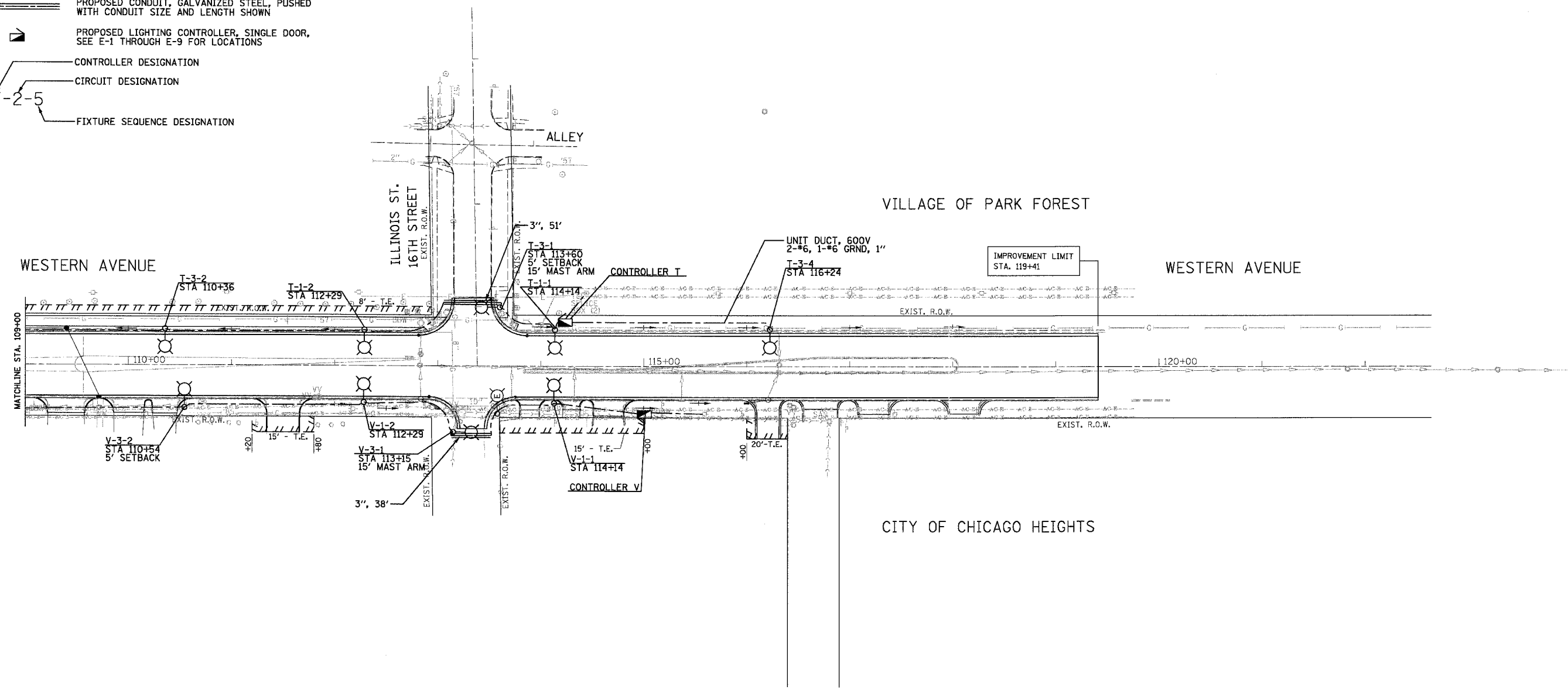
PLOT DATE = 5/19/2007
PLOT SCALE = AS SHOWN
USER NAME = AUSER18

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	142
STA. 109+00		TO STA. 119+41		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



LEGEND:

-  PROPOSED SINGLE ARM LIGHTING UNIT
35' MOUNTING HEIGHT, 12' MAST ARM,
250 W LUMINAIRE METAL HELIX FNDN
BREAKAWAY TYPE WITH 3' BACK OF
CURB SETBACK UNLESS OTHERWISE NOTED
-  UNIT DUCT, 600V, TYPE XLP
4-#6, 1-#6 GRND, 1/2",
UNLESS OTHERWISE NOTED
-  PROPOSED CONDUIT, GALVANIZED STEEL, PUSHED
WITH CONDUIT SIZE AND LENGTH SHOWN
-  PROPOSED LIGHTING CONTROLLER, SINGLE DOOR,
SEE E-1 THROUGH E-9 FOR LOCATIONS
-  CONTROLLER DESIGNATION
-  CIRCUIT DESIGNATION
-  FIXTURE SEQUENCE DESIGNATION



PLOT DATE = 8/18/07
 FILE NAME = 07E18
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = JUBER

EPSTEIN
 A. EPSTEIN AND SONS INTERNATIONAL, INC.
 420 WEST FULTON STREET, CHICAGO, ILLINOIS 60611-1989
 T: 312-464-3900 F: 312-669-1217 www.epstein-ai.com
 CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

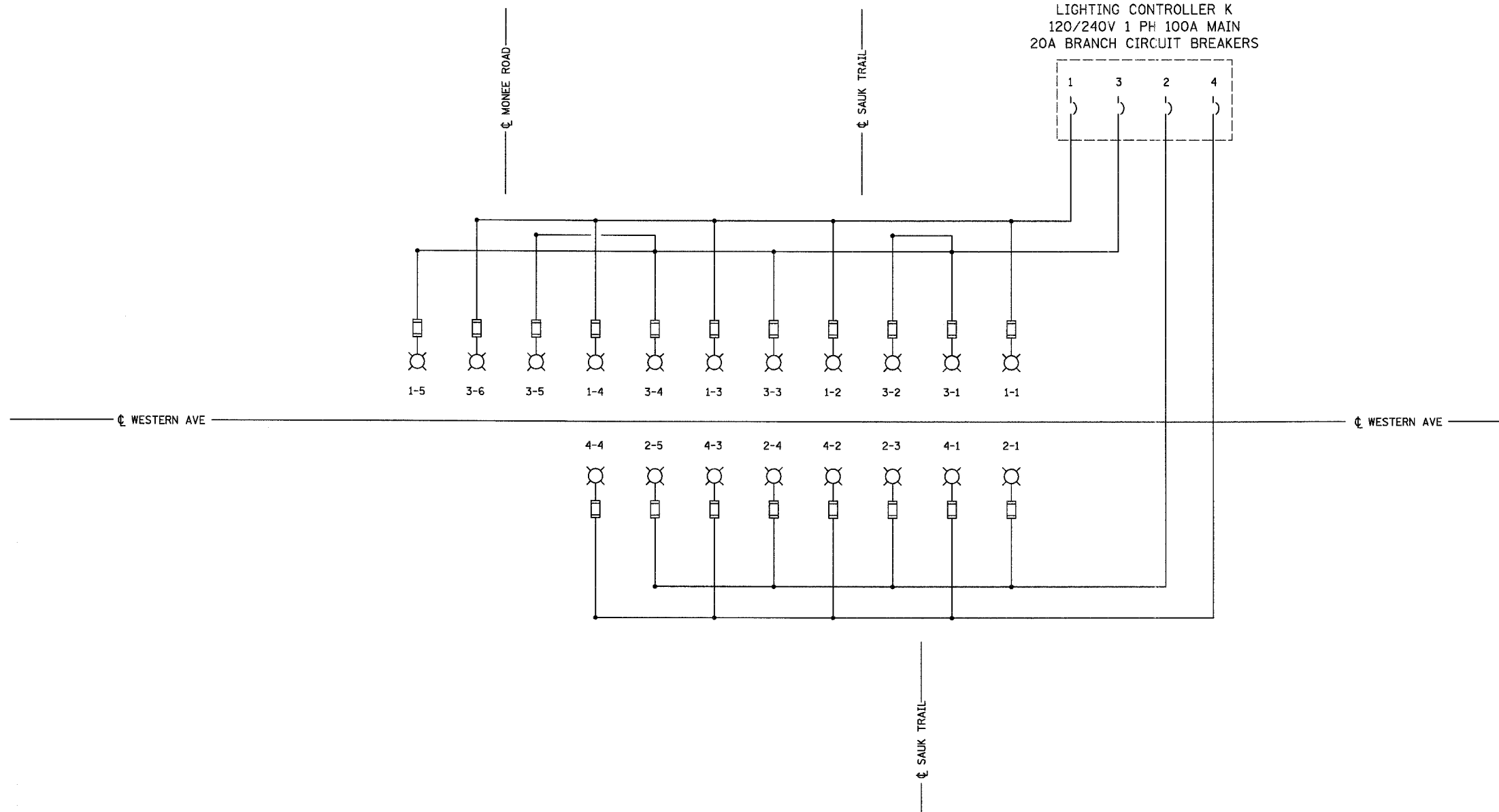
**WESTERN AVE.
 PROPOSED LIGHTING PLAN**

SCALE: 1" = 50'
 DATE: 1/7/07

DRAWN BY: A.P.
 CHECKED BY: G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	143
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

LIGHTING CONTROLLER K
120/240V 1 PH 100A MAIN
20A BRANCH CIRCUIT BREAKERS



SINGLE LINE LEGEND

- LUMINAIRE, 250 W HPS
- FUSE, 5A UNLESS OTHERWISE INDICATED
- CIRCUIT BREAKER
- 3 1/C #6 & 1/C #6 GND
- CONNECTION

LOAD TABULATION CONTROLLER K	
CIRCUIT	LOAD (WATTS)
K-1	1680
K-2	1848
K-3	2016
K-4	1344

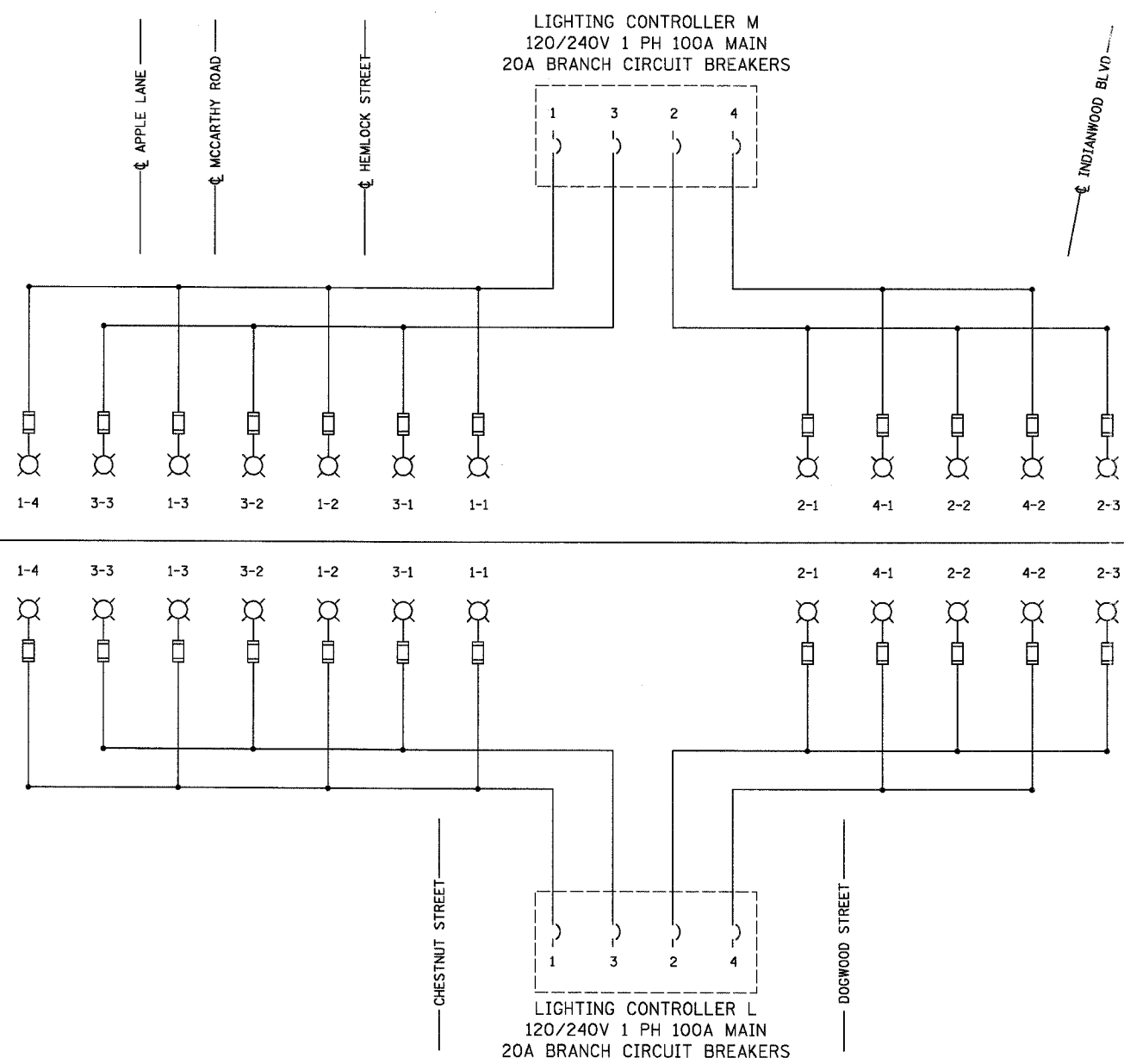
EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
400 WEST FULTON STREET, CHICAGO, ILLINOIS 60611-1996
T: 312-464-9100 F: 312-659-1217 www.epstein-il.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER K**
SCALE: N.T.S. DATE: 1/7/07
DRAWN BY: A.P.
CHECKED BY: G.A.O.

PLOT DATE = 8/12/07
FILE NAME = #TITLE#
PLOT SCALE = #SCALE#
USER NAME = #USER#

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	192	144
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



SINGLE LINE LEGEND

- LUMINAIRE, 250 W HPS
- FUSE, 5A UNLESS OTHERWISE INDICATED
- CIRCUIT BREAKER
- 3 1/C #6 & 1/C #6 GND
- CONNECTION

CIRCUIT	LOAD (WATTS)
L-1	1344
L-2	1008
L-3	1008
L-4	672

CIRCUIT	LOAD (WATTS)
M-1	1344
M-2	1008
M-3	1008
M-4	672

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER L & M

SCALE: N.T.S. DATE: 1/7/07

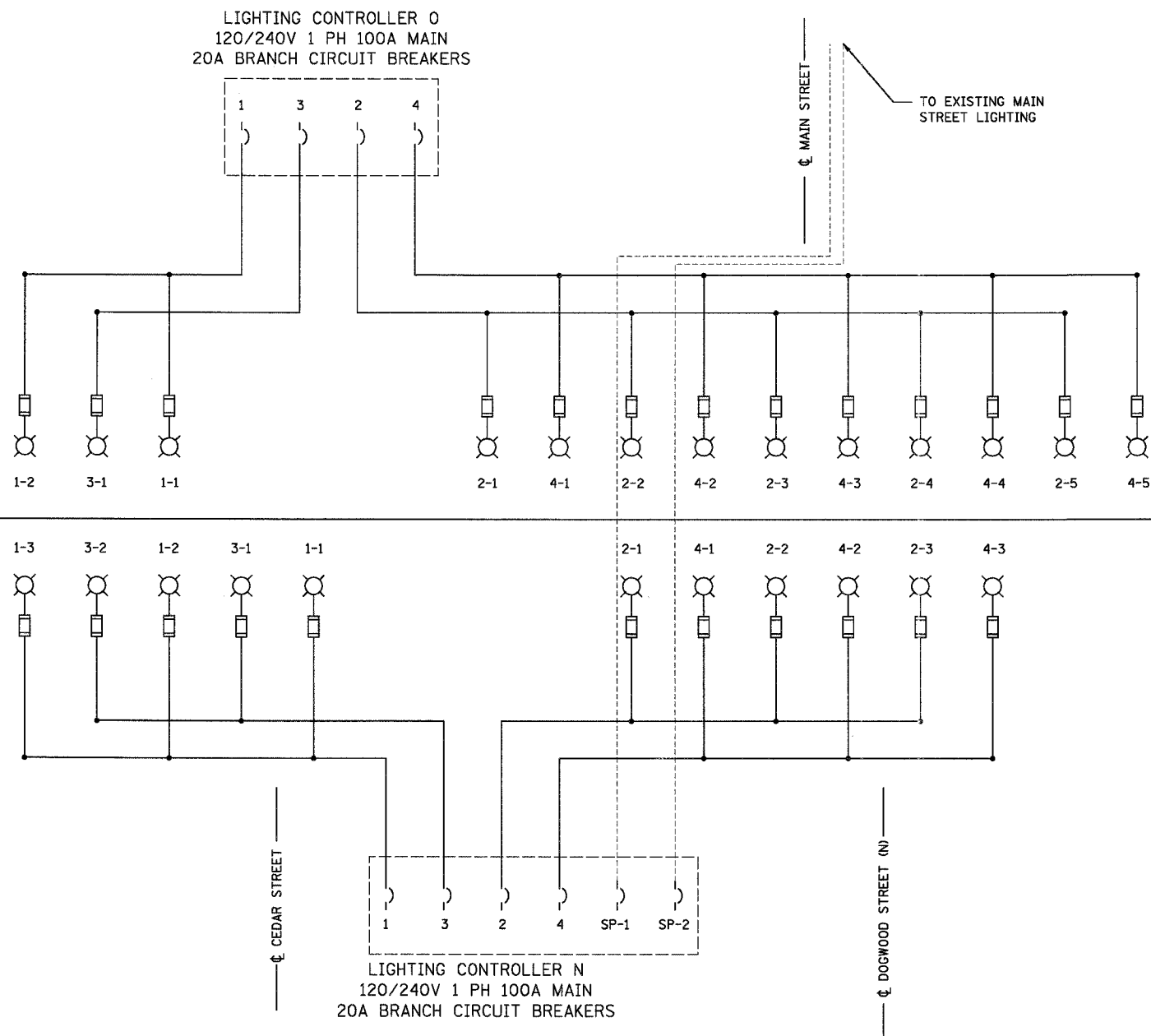
DRAWN BY: A.P.
CHECKED BY: G.A.O.

EPSTEIN

A. EPSTEIN AND SONS INTERNATIONAL, INC.
800 WEST FULTON STREET CHICAGO, ILLINOIS 60611-1100
TEL: 312-454-9150 FAX: 312-489-1217 www.epstein-intl.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLOT DATE = 5/18/2007
PLOT SCALE = 1/8"=1'-0"
USER NAME = 01BET0

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	145	145
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



SINGLE LINE LEGEND

- ⊗ LUMINAIRE, 250 W HPS
- ⊞ FUSE, 5A UNLESS OTHERWISE INDICATED
- ⌋ CIRCUIT BREAKER
- 3 1/2" #6 & 1/2" #6 GND
- CONNECTION
- EXISTING ELECTRICAL

LOAD TABULATION CONTROLLER N	
CIRCUIT	LOAD (WATTS)
N-1	1008
N-2	1008
N-3	672
N-4	1008
SPARE 1	1008
SPARE 2	1008

LOAD TABULATION CONTROLLER O	
CIRCUIT	LOAD (WATTS)
O-1	672
O-2	1680
O-3	336
O-4	1680



REVISIONS	
NAME	DATE

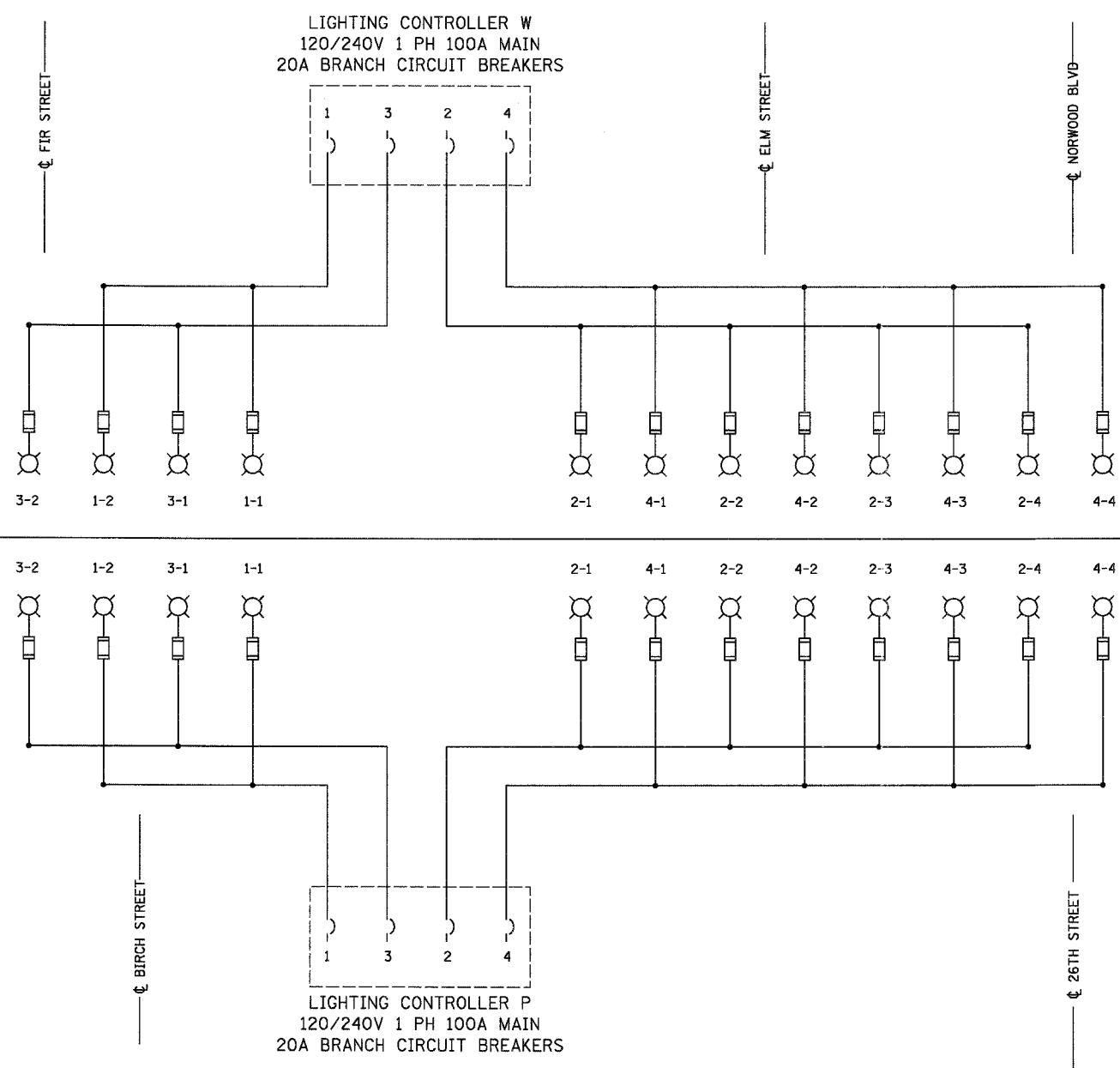
ILLINOIS DEPARTMENT OF TRANSPORTATION

WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER N & O

SCALE: N.T.S.
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	192	146
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



- SINGLE LINE LEGEND**
- LUMINAIRE, 250 W HPS
 - FUSE, 5A UNLESS OTHERWISE INDICATED
 - CIRCUIT BREAKER
 - 3 1/C #6 & 1/C #6 GND
 - CONNECTION

LOAD TABULATION CONTROLLER P	
CIRCUIT	LOAD (WATTS)
P-1	672
P-2	1344
P-3	672
P-4	1680

LOAD TABULATION CONTROLLER W	
CIRCUIT	LOAD (WATTS)
W-1	672
W-2	1344
W-3	672
W-4	1344

PLT DATE = 5/10/2007
 PLOT NAME = WESTERN AVE
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = 0105710



REVISIONS	
NAME	DATE

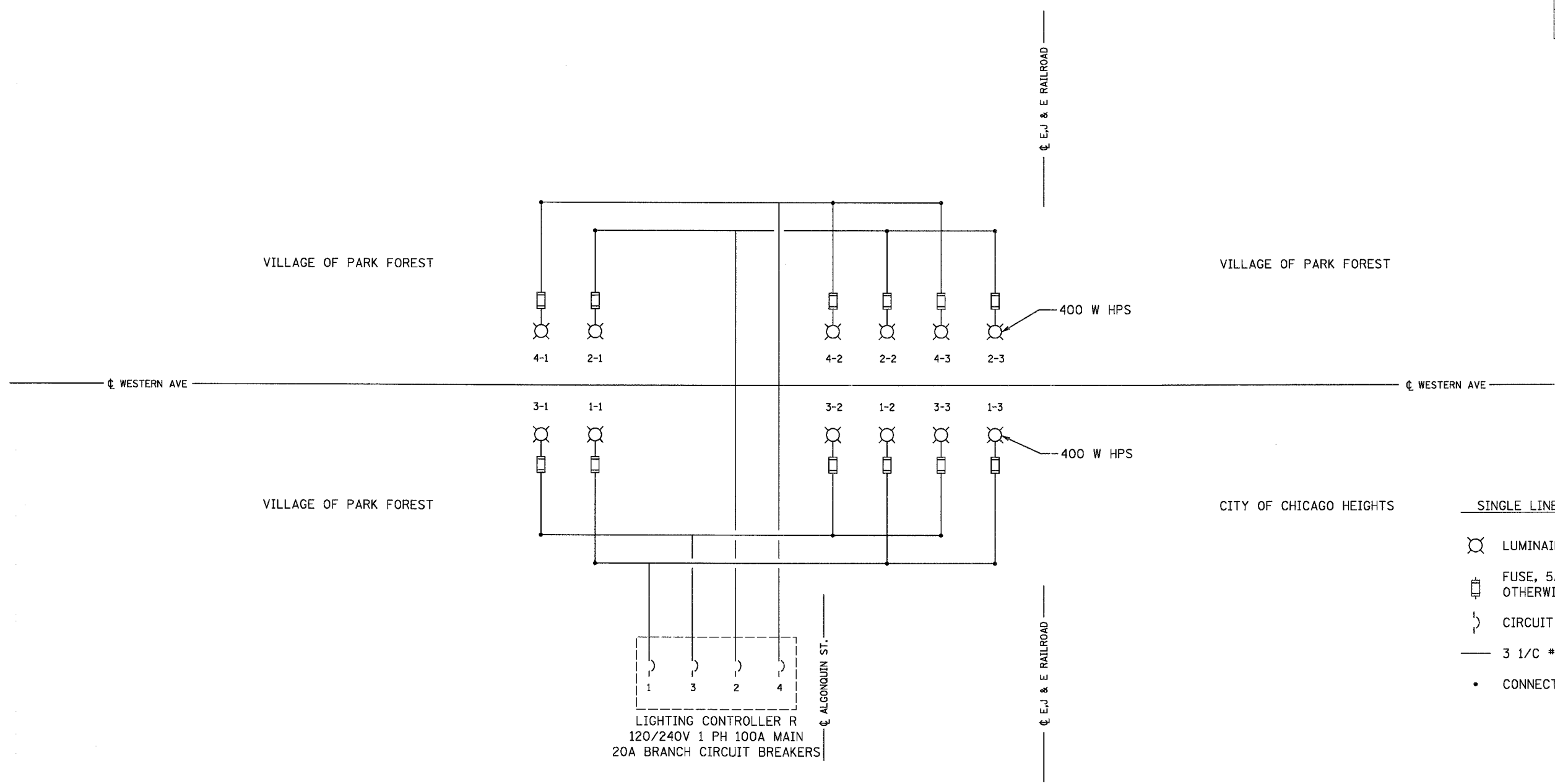
ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
 ONE LINE DIAGRAM
 CONTROLLER P & W**

SCALE: N.T.S.
 DATE: 1/7/07

DRAWN BY: A.P.
 CHECKED BY: G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	147
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



- SINGLE LINE LEGEND**
- LUMINAIRE, 250 W HPS, U.O.N.
 - FUSE, 5A UNLESS OTHERWISE INDICATED
 - CIRCUIT BREAKER
 - 3 1/C #6 & 1/C #6 GND
 - CONNECTION

LIGHTING CONTROLLER R
120/240V 1 PH 100A MAIN
20A BRANCH CIRCUIT BREAKERS

LOAD TABULATION CONTROLLER R	
CIRCUIT	LOAD (WATTS)
R-1	1176
R-2	1176
R-3	1008
R-4	1008

PLOT DATE = 5/19/07
 FILE NAME = 071E1
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = MURER



REVISIONS	
NAME	DATE

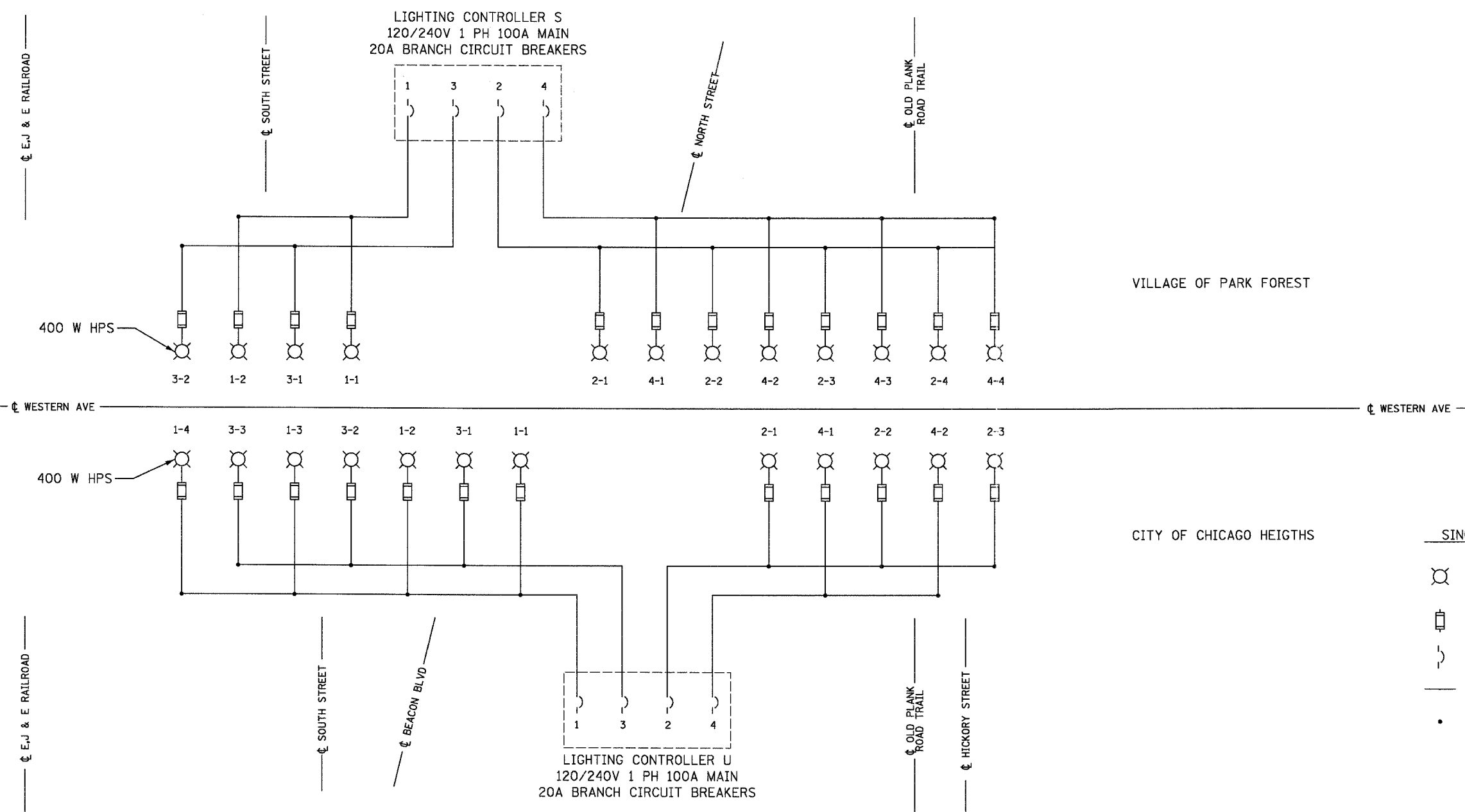
ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER R**

SCALE: N.T.S.
DATE: 1/7/07

DRAWN BY: A.P.
CHECKED BY: G.A.O.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	192	149
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



- SINGLE LINE LEGEND**
- LUMINAIRE, 250 W HPS, U.O.N.
 - FUSE, 5A UNLESS OTHERWISE INDICATED
 - CIRCUIT BREAKER
 - 3 1/C #6 & 1/C #6 GND
 - CONNECTION

LOAD TABULATION CONTROLLER S	
CIRCUIT	LOAD (WATTS)
S-1	672
S-2	1344
S-3	840
S-4	1344

LOAD TABULATION CONTROLLER U	
CIRCUIT	LOAD (WATTS)
U-1	1512
U-2	1008
U-3	1008
U-4	672

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER S & U**

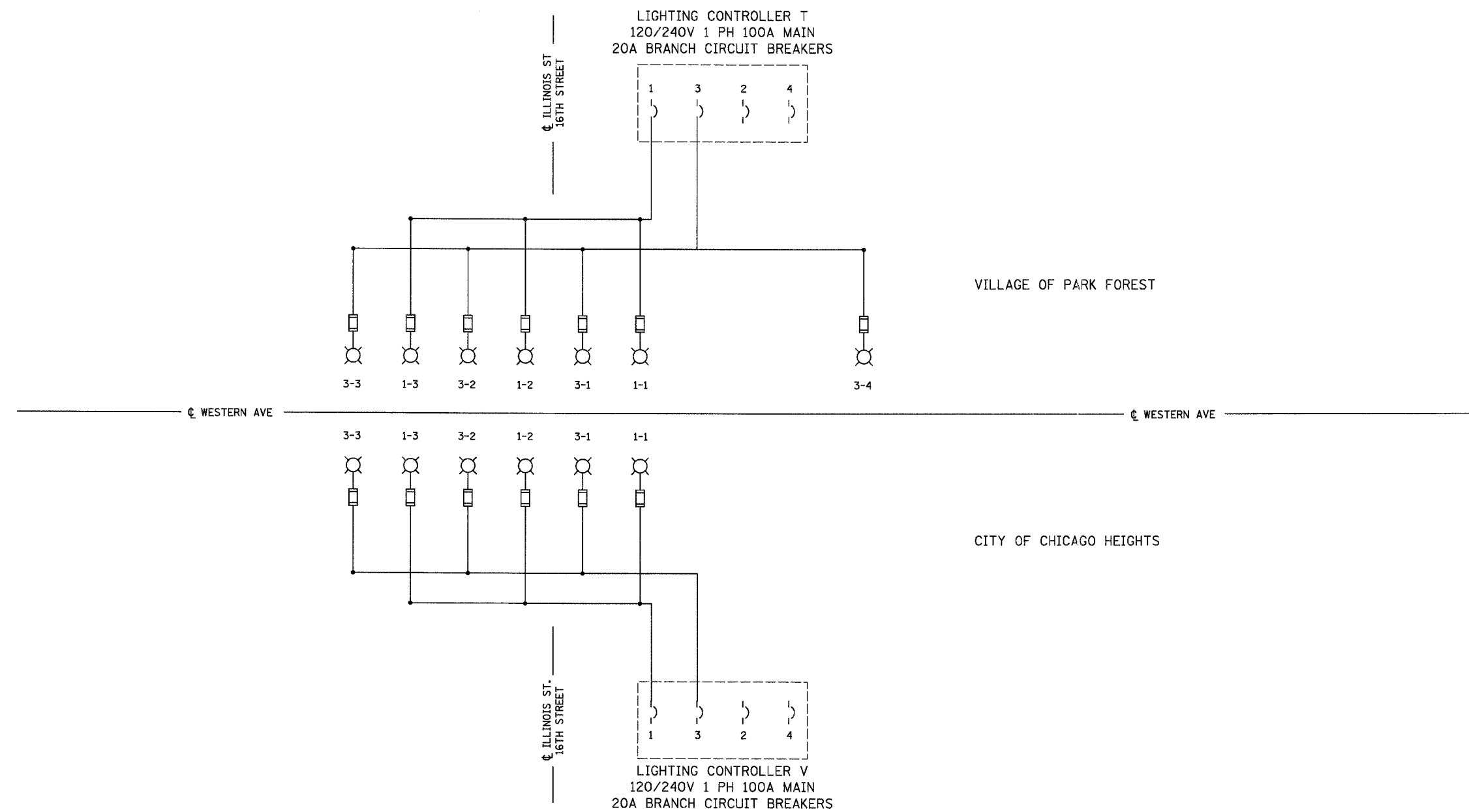
SCALE: N.T.S. DRAWN BY: A.P.
DATE: 1/7/07 CHECKED BY: G.A.O.

EPSTEIN

A. EPSTEIN AND SONS INTERNATIONAL, INC.
800 WEST FULLON STREET, CHICAGO, ILLINOIS 60661-1100
T: 312-454-0100 F: 312-869-1917 www.epstein-isi.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

PLT DATE = 5/10/2007
FILE NAME = #149
USER NAME = #149

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	149
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT



- SINGLE LINE LEGEND**
- LUMINAIRE, 250 W HPS
 - FUSE, 5A UNLESS OTHERWISE INDICATED
 - CIRCUIT BREAKER
 - 3 1/C #6 & 1/C #6 GND
 - CONNECTION

LOAD TABULATION CONTROLLER T	
CIRCUIT	LOAD (WATTS)
T-1	1008
T-2	0
T-3	1344
T-4	0

LOAD TABULATION CONTROLLER V	
CIRCUIT	LOAD (WATTS)
V-1	1008
V-2	0
V-3	1008
V-4	0

E-25

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

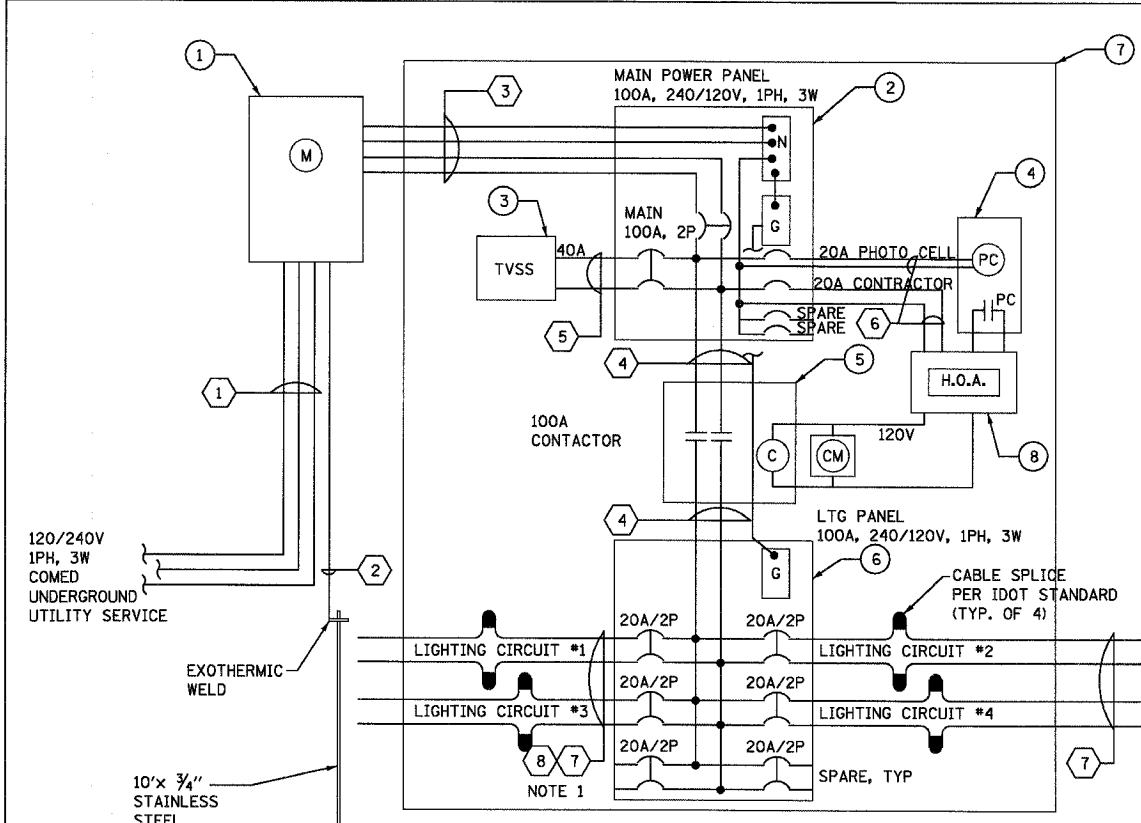
**WESTERN AVE.
ONE LINE DIAGRAM
CONTROLLER T & V**

SCALE: N.T.S. DRAWN BY: A.P.
DATE: 1/7/07 CHECKED BY: C.A.O.



PLOT DATE = 6/18/2007
 FILE NAME = #FILE#
 FILE NO. = #FILE#
 USER NAME = #USER#

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	19	17
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



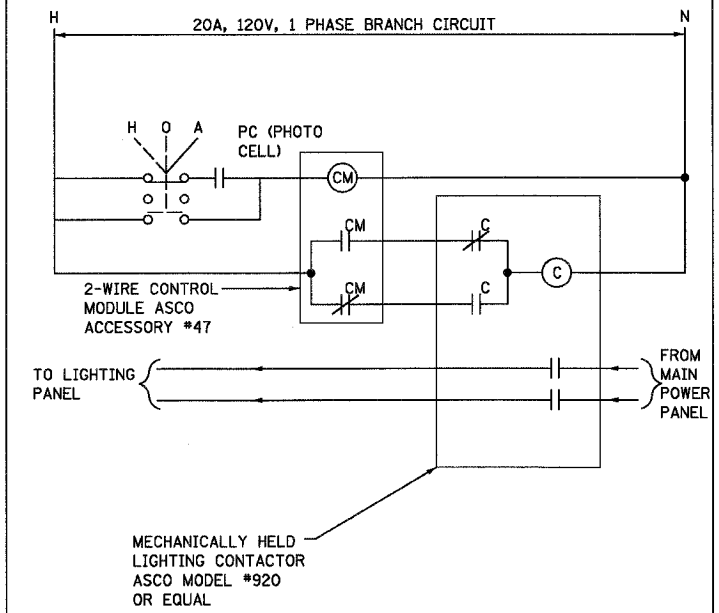
CONTROLLER WIRING DIAGRAM

CONTROLLER ID: K, L, M, N, O, P, R, S, T, U, V, W.

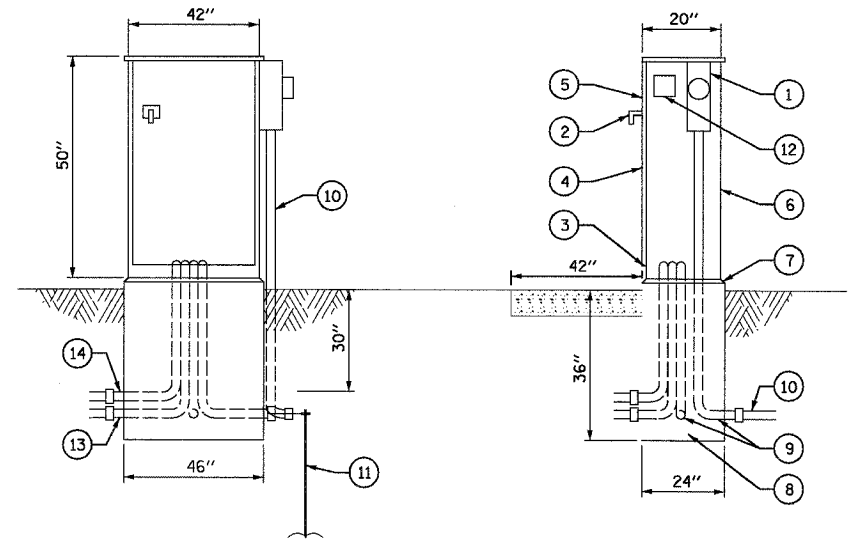
NOTE 1:
CIRCUIT #1 AND #3 SHALL BE USED FOR TEMPORARY LIGHTING. REUSE THE SAME CIRCUITS FOR PROPOSED LIGHTING AFTER DISCONNECTION OF TEMPORARY LIGHTING CIRCUIT.

ITEM	QTY	ITEM DESCRIPTION	REMARKS
①		METER HOUSING AND SOCKET	NEMA 3R, C.E.CO. APPROVED
②		MAIN PANEL, 100A, 240V, 1 PHASE 3WIRE, 22KAIC	NEMA-1 SERVICE ENTRANCE RATED
③		TRANSIENT VOLTAGE SURGE SUPPRESSION PANEL (TVSS)	180KA PER MODE
④		PHOTO-CELL	CONTROL CIRCUIT
⑤		FEDDER CIRCUIT CONTACTOR, 100A,240V, 22KAIC	CONTROL CIRCUIT
⑥		LIGHTING PANEL, MLO, 100A, 240V, 1PHASE, 3 WIRE	BRANCH PANEL, NEMA-1
⑦		ENCLOSURE	NEMA 3R, AS PER IDOT STANDARDS
⑧		HAND-OFF-AUTO	NEMA 1 JUNCTION BOX AND SELECTOR SWITCH

ITEM	AMPS	COPPER WIRING (AWG)	CONDUIT	REMARKS
①	100A	3 * 1/0	1/2" RGS	SERVICE RATED TYPE U.S.E.
②		1 * 6	3/4" RGS	SERVICE GROUND
③	100A	3 * 1/0, 1 * 6 GND	1/2" RGS	MAIN POWER PANEL
④	100A	2 * 1, 1 * 6 GND	1/2" RGS	LIGHTING PANEL
⑤	40A	2* 8, 1 * 10 GND	3/4" RGS	TVSS
⑥	20A	2* 12, 1*12 GND	3/4" RGS	PHOTO-CELL, CONTACTOR
⑦	20A	4 * 6, 1 * 6 GND	1/2" UNIT DUCT	PROPOSED LIGHTING CIRCUIT IN UNIT DUCT
⑧	20A	4 * 4, 1 * 6 GND	1/2" UNIT DUCT	TEMPORARY LIGHTING CIRCUIT IN UNIT DUCT

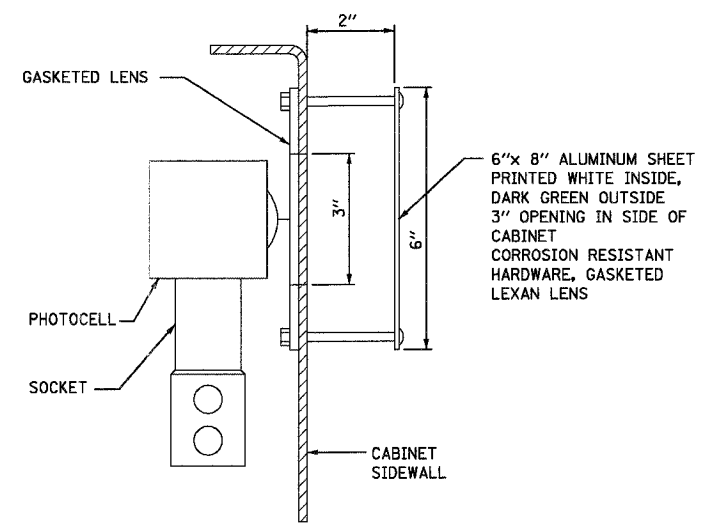


EXTERIOR LIGHTING CONTROL SCHEMATIC



CONTROLLER CABINET & FOUNDATION DETAIL

ITEM	QTY	DESCRIPTION
①		RINGLESS TYPE METER SOCKET. (COORDINATE REQUIREMENTS WITH COMED)
②		3/4" HANDLE LATCH & SHOOT BOLTS
③		RUBBER GASKET BETWEEN DOOR AND BACK HINGE
④		STAINLESS STEEL PIANO HINGE
⑤		FORMED DOOR
⑥		CONTROLLER TO BE CONSTRUCTED OF 1/8" THICK SHEET ALUMINUM
⑦		1" CHAMFER
⑧		POURED IN PLACE CLASS SI CONCRETE FOUNDATION
⑨		GALVANIZED STEEL CONDUITS AS SPECIFIED ON PLAN, PLUS ONE MORE THAN NECESSARY
⑩		GALVANIZED STEEL CONDUITS, 1/2" DIA., TO SERVICE CONNECTION
⑪		GROUND ROD CONNECTED TO GROUND WIRE WITH EXOTHERMIC WELD
⑫		3"x 3" LEXAN WINDOW IN CABINET WALL FOR PHOTOCELL
⑬		PROPOSED LIGHTING RACEWAY (1/2" CONDUIT SLEEVE)
⑭		TEMPORARY LIGHTING RACEWAY (1/2" CONDUIT SLEEVE)



PHOTOCELL MOUNTED IN CONTROLLER CABINET

EPSTEIN
A. EPSTEIN AND SONS INTERNATIONAL, INC.
408 WEST FULLTON ST./CHICAGO, ILLINOIS 60611-1999
TEL: 312-464-9190 FAX: 312-459-1217 www.epstein-intl.com
CHICAGO LOS ANGELES TEL AVIV WARSAW BUCHAREST

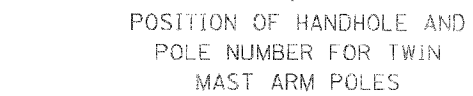
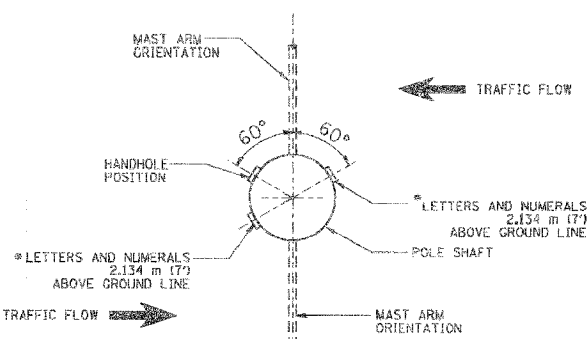
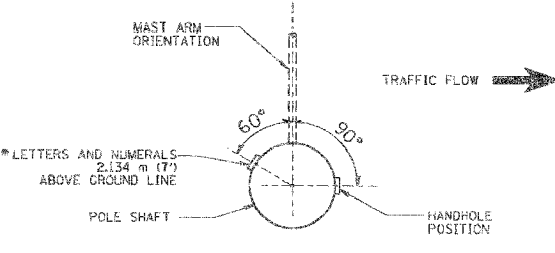
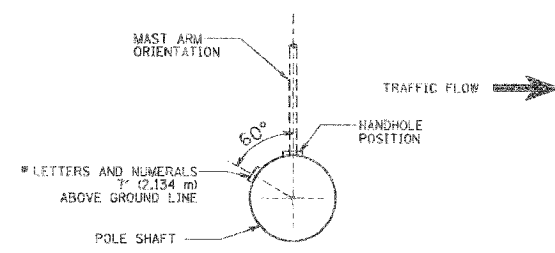
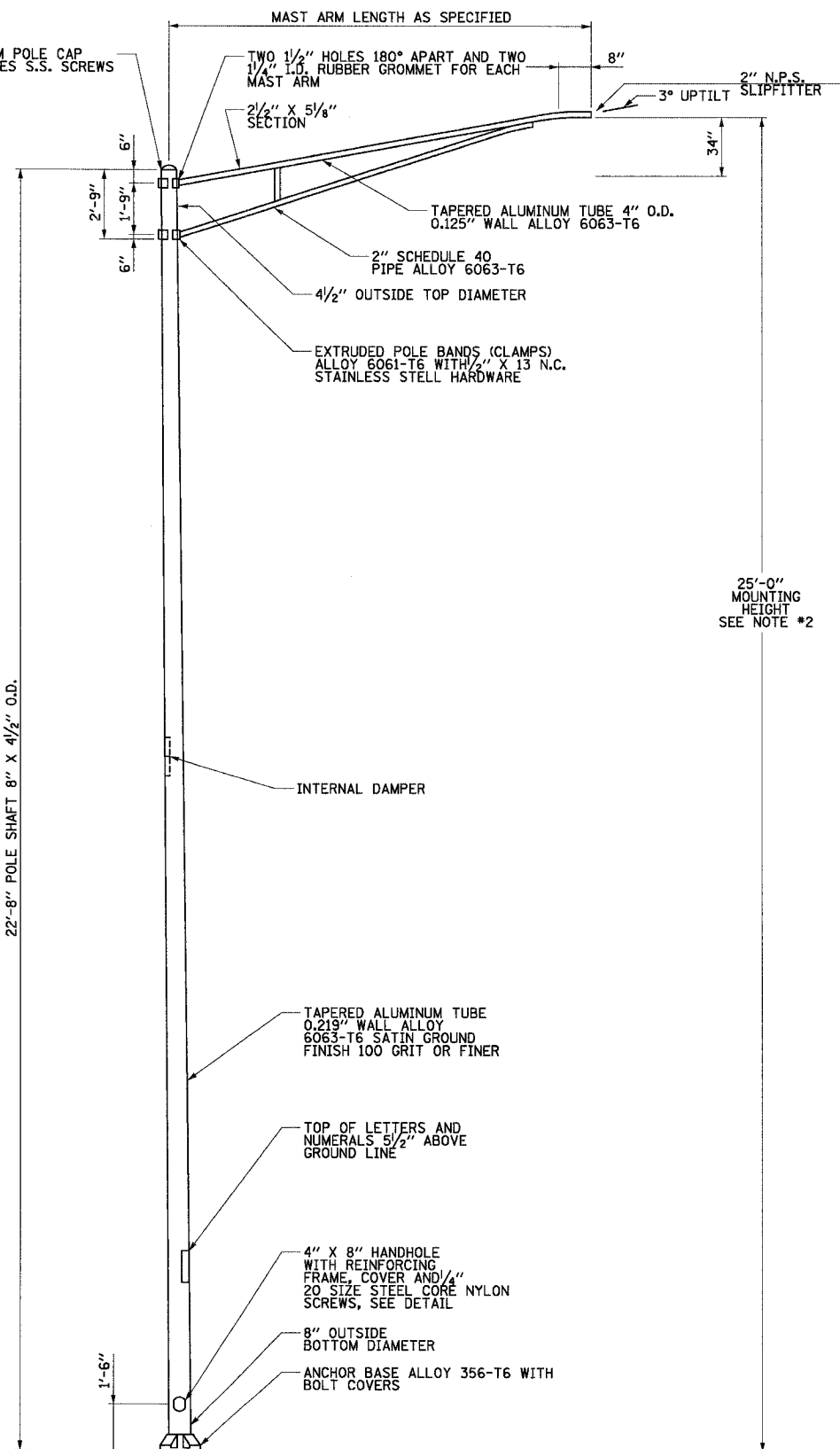
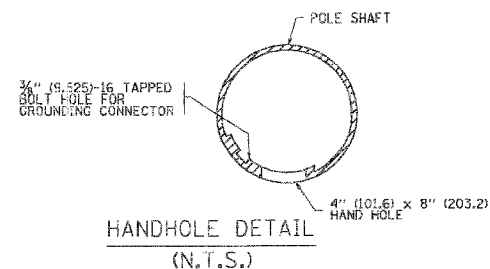
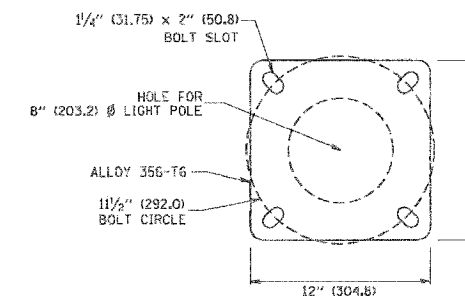
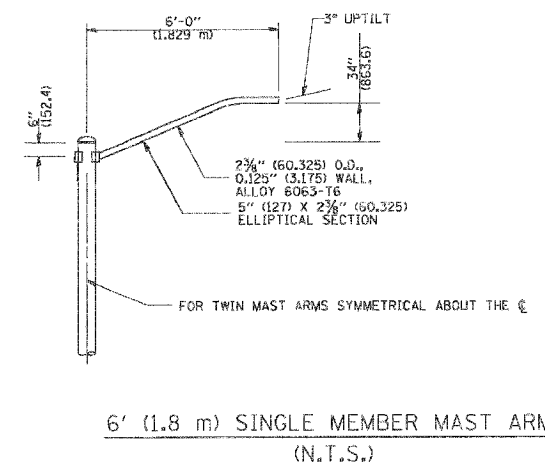
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
WESTERN AVE. CONTROLLER DETAIL
SCALE: N.T.S.
DATE: 1/7/07
DRAWN BY: A.P.
CHECKED BY: G.A.O.

PLOT DATE = 5/19/2007
FILE NAME = 017117
PLOT SCALE = 1/8"=1'-0"
USER NAME = MUSENO

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	19	11
STA. -		TO STA. -		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

- NOTES:
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
 2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TOWER TO THE BOTTOM OF THE ANCHOR BASE.
 3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
 4. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
 5. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
 6. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
 7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

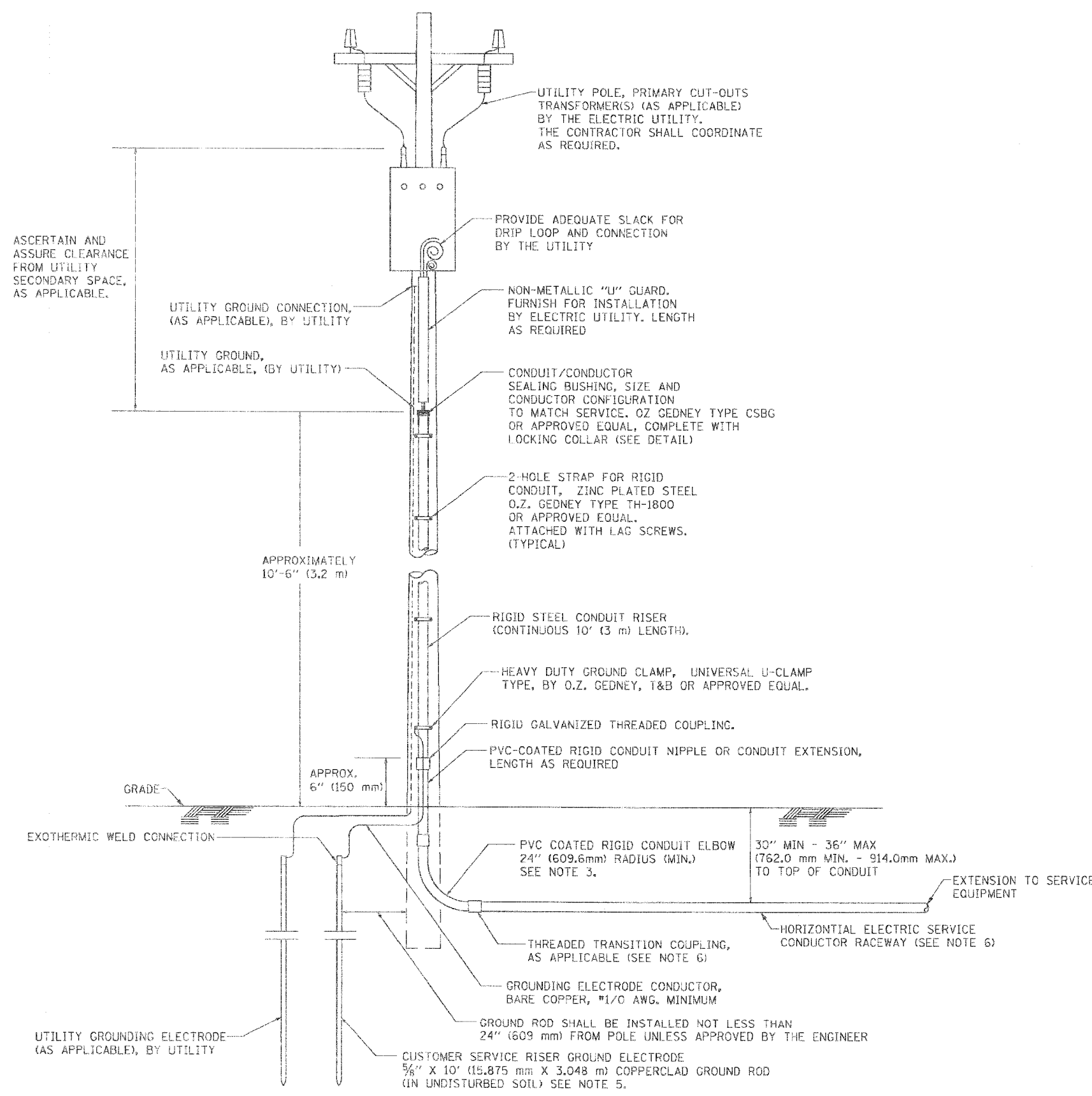
WESTERN AVE. ALUMINUM LIGHT POLE 25'-0" MOUNTING HEIGHT DETAIL

SCALE: N.T.S. DATE: 1/7/07

DRAWN BY: A.P. CHECKED BY: G.A.O.

PLOT DATE = 5/18/2007
 FILE NAME = 071111
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = MURPHY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	150
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

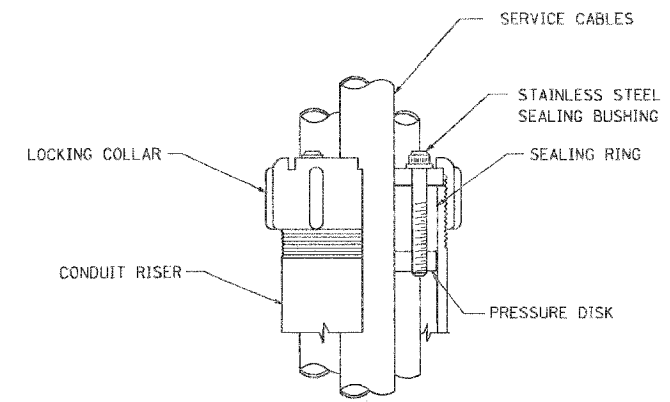


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

PLOT DATE = 1/9/2007
 FILE NAME = 1500000000.dwg
 PLOT SCALE = 50.0000 / 1/8"
 USER NAME = ulr-robld

BE-220

REVISIONS	
NAME	DATE

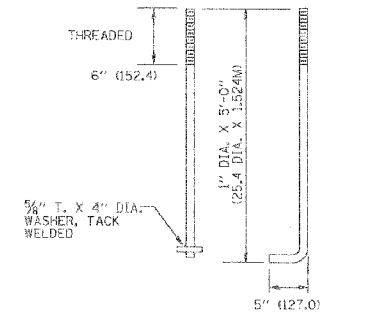
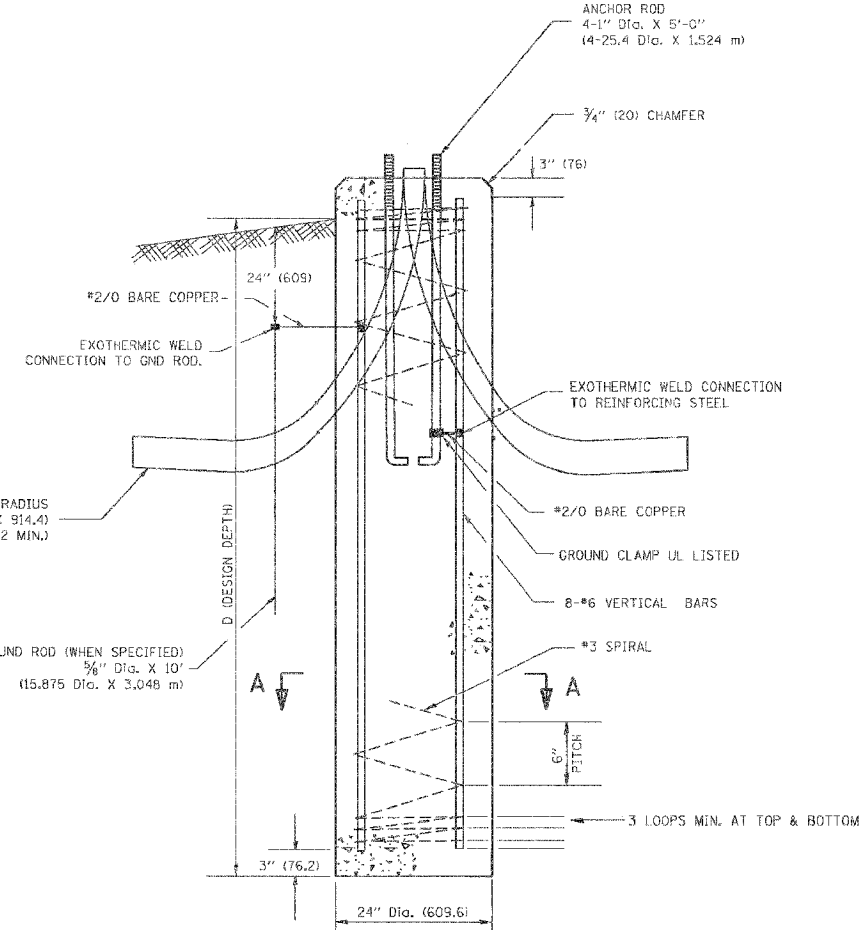
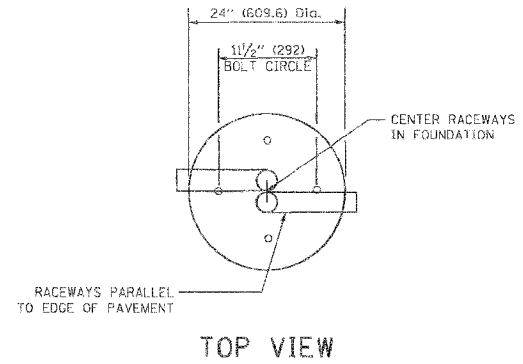
ILLINOIS DEPARTMENT OF TRANSPORTATION
**ELECTRIC SERVICE INSTALLATION
 AERIAL, REMOTE DISCONNECT
 BE - 220**

SCALE: NONE
 DATE: 1/9/2007
 DRAWN BY
 CHECKED BY MEA

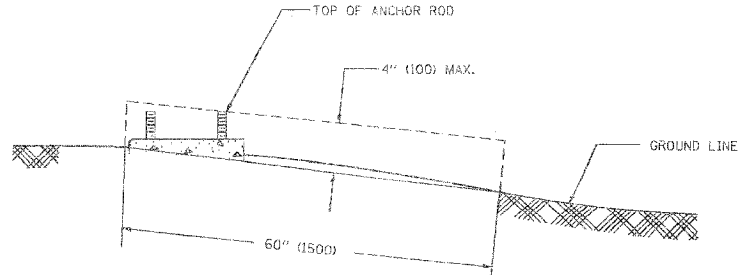
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	153
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144M) TO 35 FT. (10.668M) MOUNTING HEIGHT

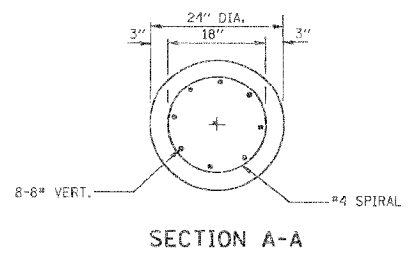
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35)	12'-8" (3.85M)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-0" (2.74M)	14'-10" (4.52M)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29M)	8'-7" (2.61M)
LOOSE SAND φ = 34°	9'-6" (2.90M)	10'-7" (3.22M)
MEDIUM SAND φ = 37.5°	9'-0" (2.74M)	9'-10" (2.99M)
DENSE SAND φ = 40°	8'-3" (2.51M)	9'-7" (2.91M)



ANCHOR BOLT DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A

NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100MM) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5M) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20MM).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 MM) WITH A MINIMUM OF 3 INCHES (75 MM) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9MM) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4MM) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8MM) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERRECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4MM) ABOVE THE TOP OF THE FOUNDATION.

REVISIONS	
NAME	DATE
D. SIMON	4/93
D. DREW	06/15/95

ILLINOIS DEPARTMENT OF TRANSPORTATION
LIGHT POLE FOUNDATION
30' (9.144M) TO 35' (10.668M) M.H.
1 1/2" (292mm) BOLT CIRCLE

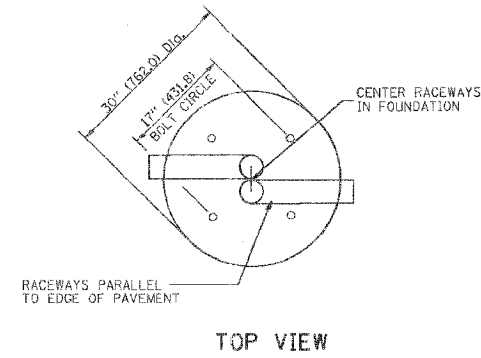
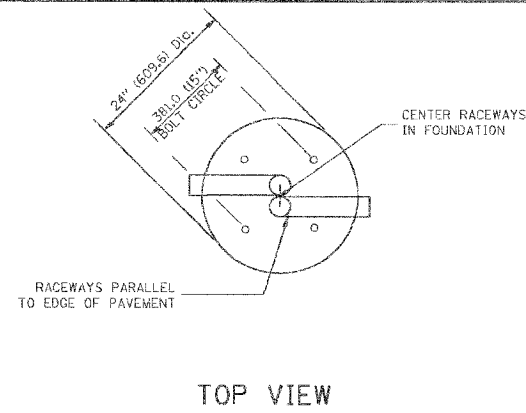
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DRAWN BY
CHECKED BY
E-300 (BE-300)
REVISION DATE: 01/01/07

PLOT DATE = 1/9/2007
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 USER = drc
 PLOT SCALE = 1/8" = 1'-0"

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	154
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

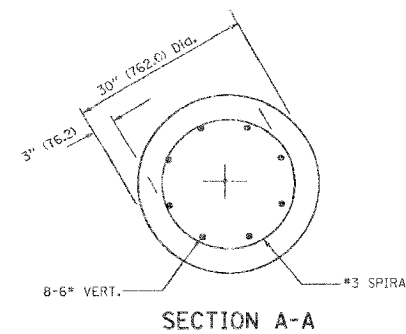
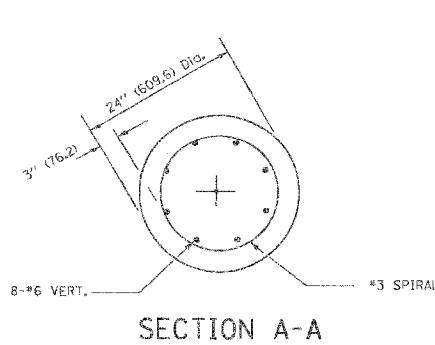
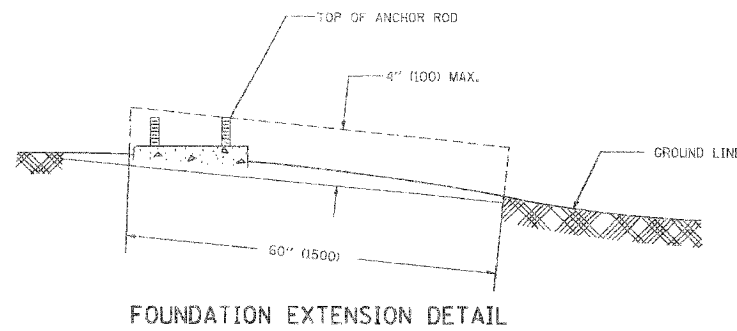
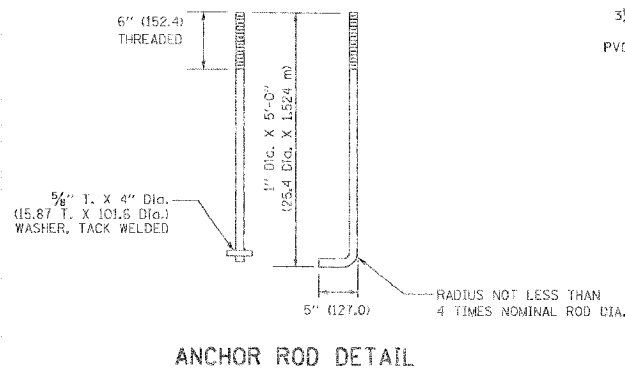
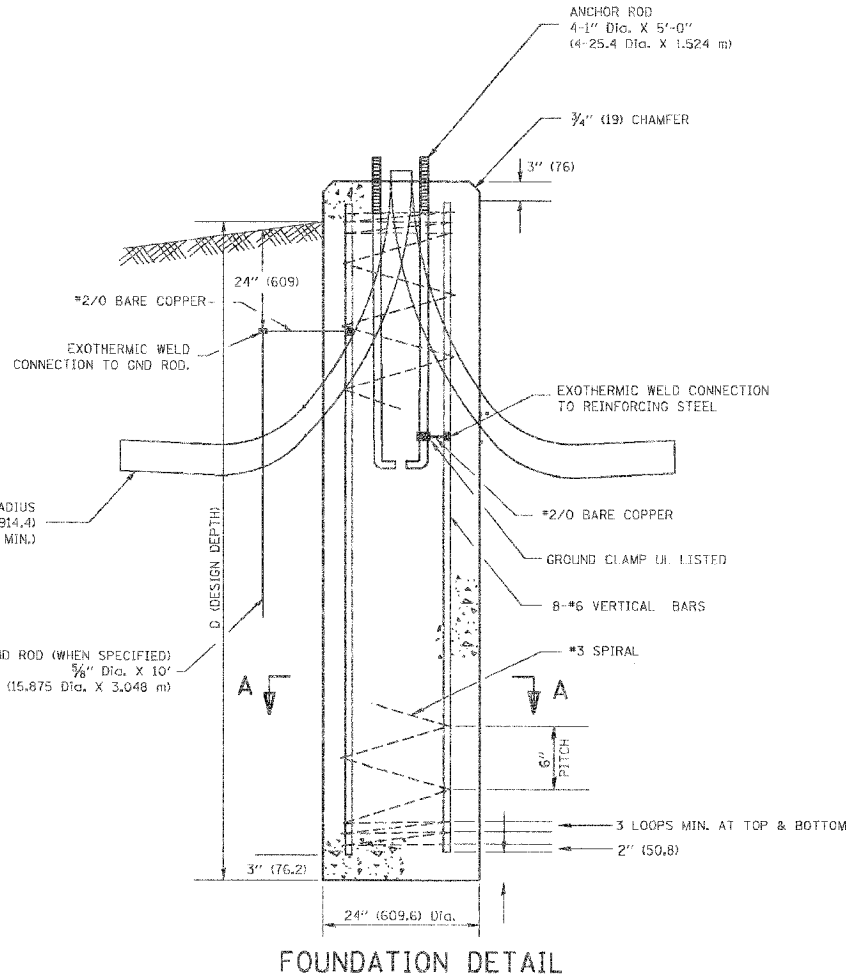
LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192M) TO 47.5 FT. (14.478M) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96M)	15'-0" (4.57M)
MEDIUM CLAY Qu = 0.75 TON/SQ. FT.	9'-6" (2.93M)	10'-9" (3.23M)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13M)	8'-0" (2.44M)
LOOSE SAND φ = 34°	9'-0" (2.74M)	10'-0" (3.05M)
MEDIUM SAND φ = 37.5°	8'-3" (2.52M)	9'-0" (2.74M)
DENSE SAND φ = 40°	7'-9" (2.36M)	9'-0" (2.74M)



NOTES

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5M) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20MM).
- THE CONCRETE SHALL BE CLASS SL. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 252, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UMG MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 MM) WITH A MINIMUM OF 3 INCHES (75 MM) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9MM) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4MM) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8MM) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4MM) ABOVE THE TOP OF THE FOUNDATION.

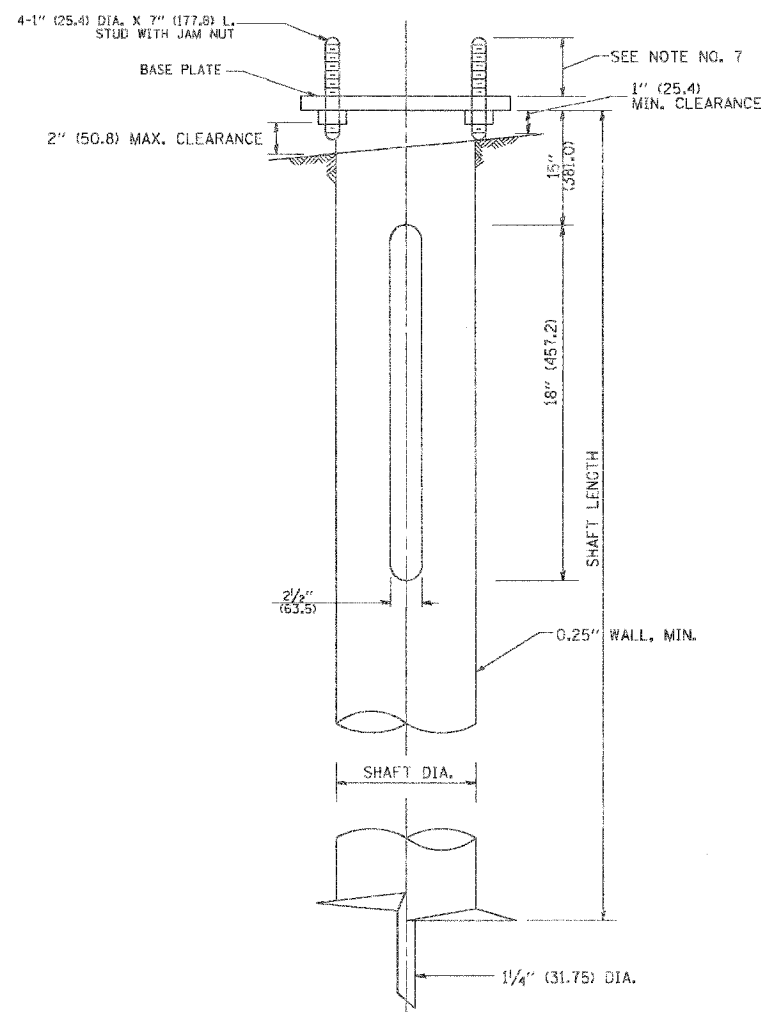
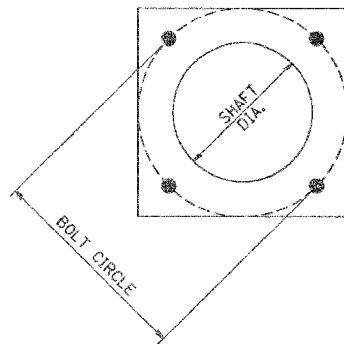


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LIGHT POLE FOUNDATION
40' (12.192M) TO 47 1/2' (14.478M) M.H.
15" (381) BOLT CIRCLE

SCALE: NONE
DATE: 1/9/2007
DRAWN BY
CHECKED BY
BE 301
REVISION DATE: 01/01/07

P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845		COOK	195	155
STA.	TO STA.			
FED. ROAD DIST. NO.	1	ALIGNMENT	FED. AID PROJECT	



HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 3/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 3/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 3/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 3/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

NOTES:

- ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- ALL MATERIAL SHALL BE GALVANIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
- ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
- THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
- THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
- THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
- ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
- METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
- THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
- THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ($\pm 1^\circ$) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
- THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE ($\pm 2^\circ$).
- THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.
- CONDUCTORS NOT USED IN POLE SHALL PASS THROUGH POLE FOUNDATION.

BE-305

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION, METAL

REVISIONS	
NAME	DATE
CREATED	02/27/07

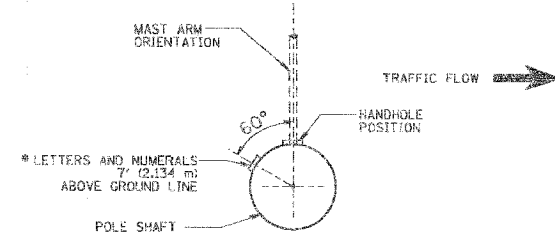
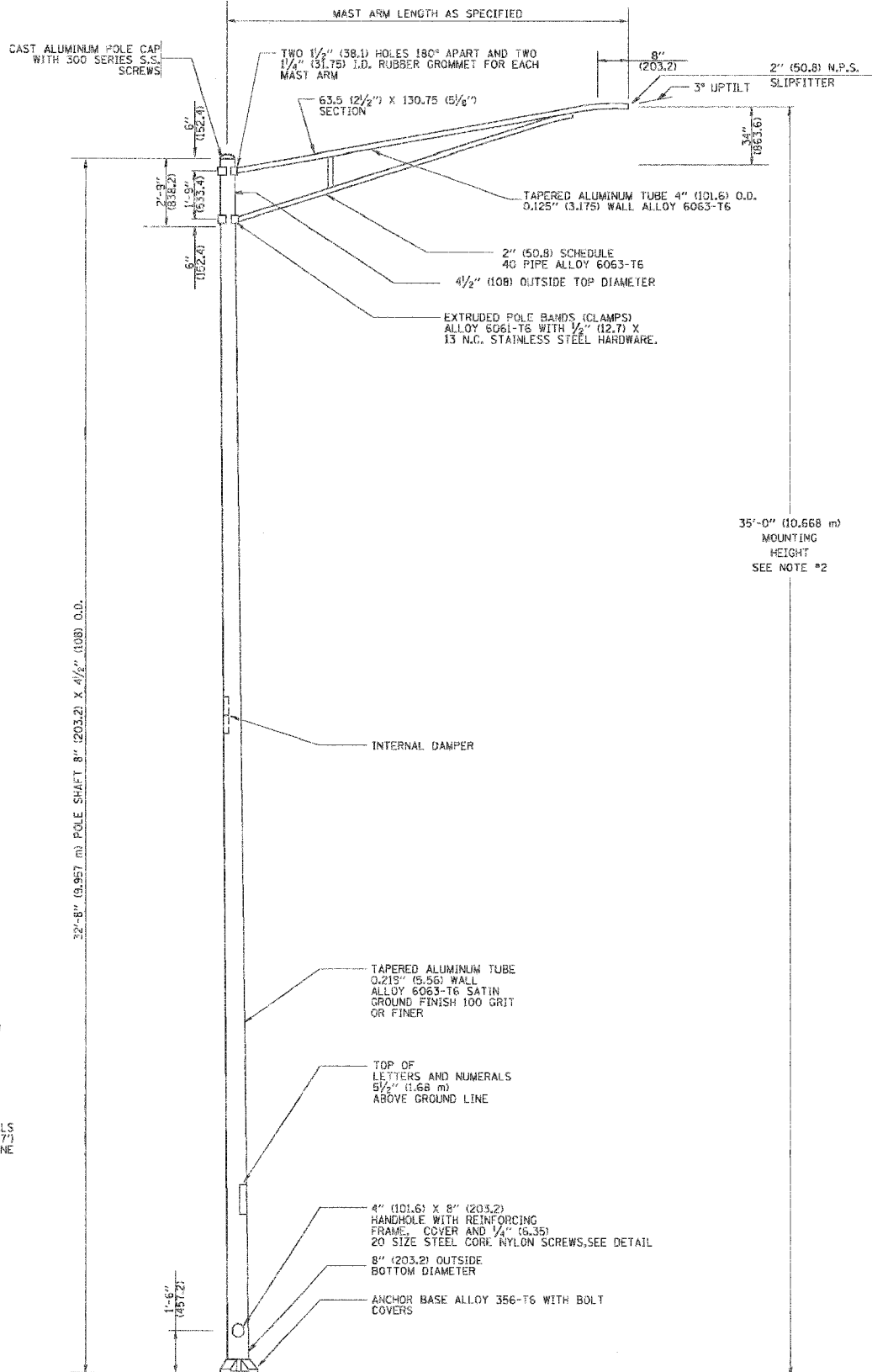
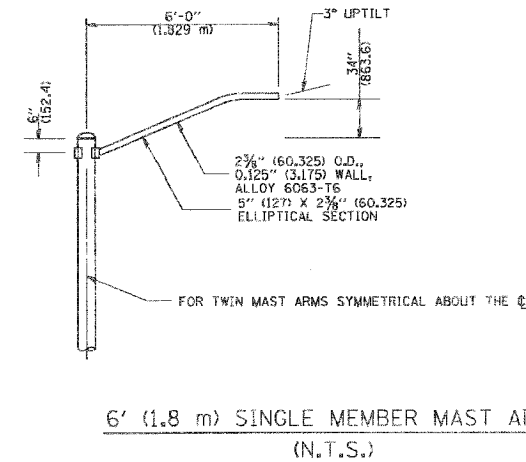
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DATE 2/27/2007

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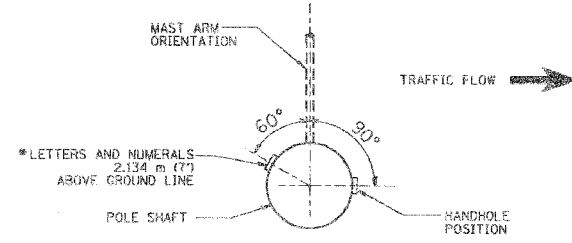
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2845	3152 WRS	COOK	195	156
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTES:

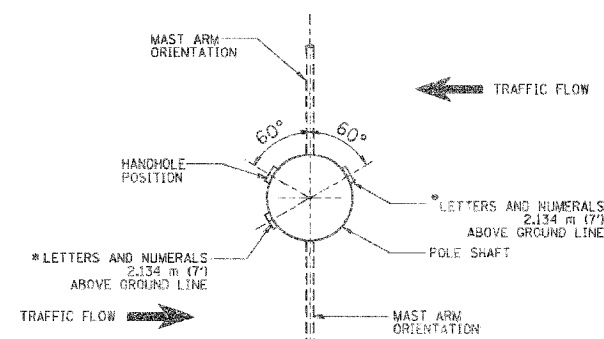
1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TOWER TO THE BOTTOM OF THE ANCHOR BASE.
3. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
4. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
5. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
6. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
7. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



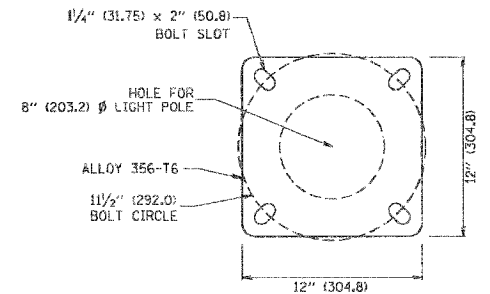
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



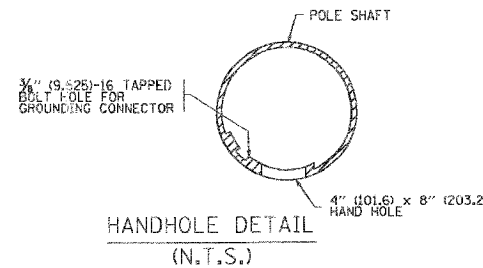
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



LIGHT POLE BASE PLATE DETAIL
1 1/2" (292.0) BOLT CIRCLE



HANDHOLE DETAIL
(N.T.S.)

REVISIONS	
NAME	DATE
R. TOMSONS	9-6-00
R. TOMSONS	8-12-03

ILLINOIS DEPARTMENT OF TRANSPORTATION
ALUMINUM LIGHT POLE
 35'-0" (10.668 m)
 MOUNTING HEIGHT

SCALE: NONE
 DATE: 1/16/2007

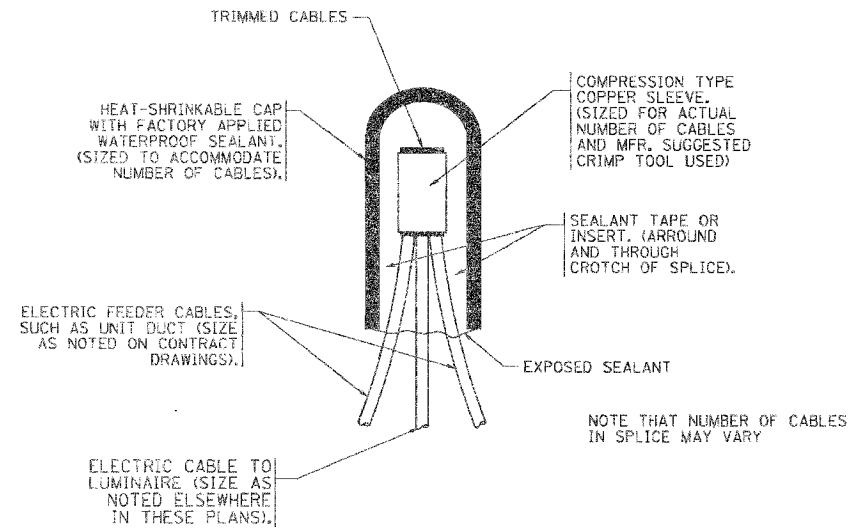
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 CHECKED BY
 BE-402

BE-402

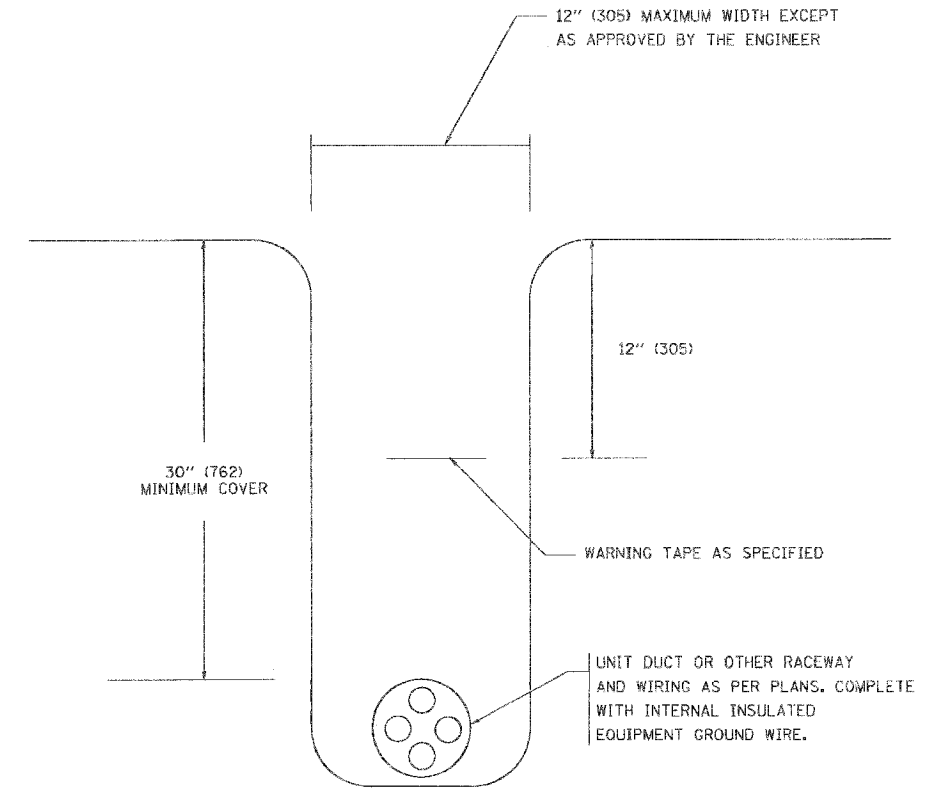
REVISION DATE: 01/01/07

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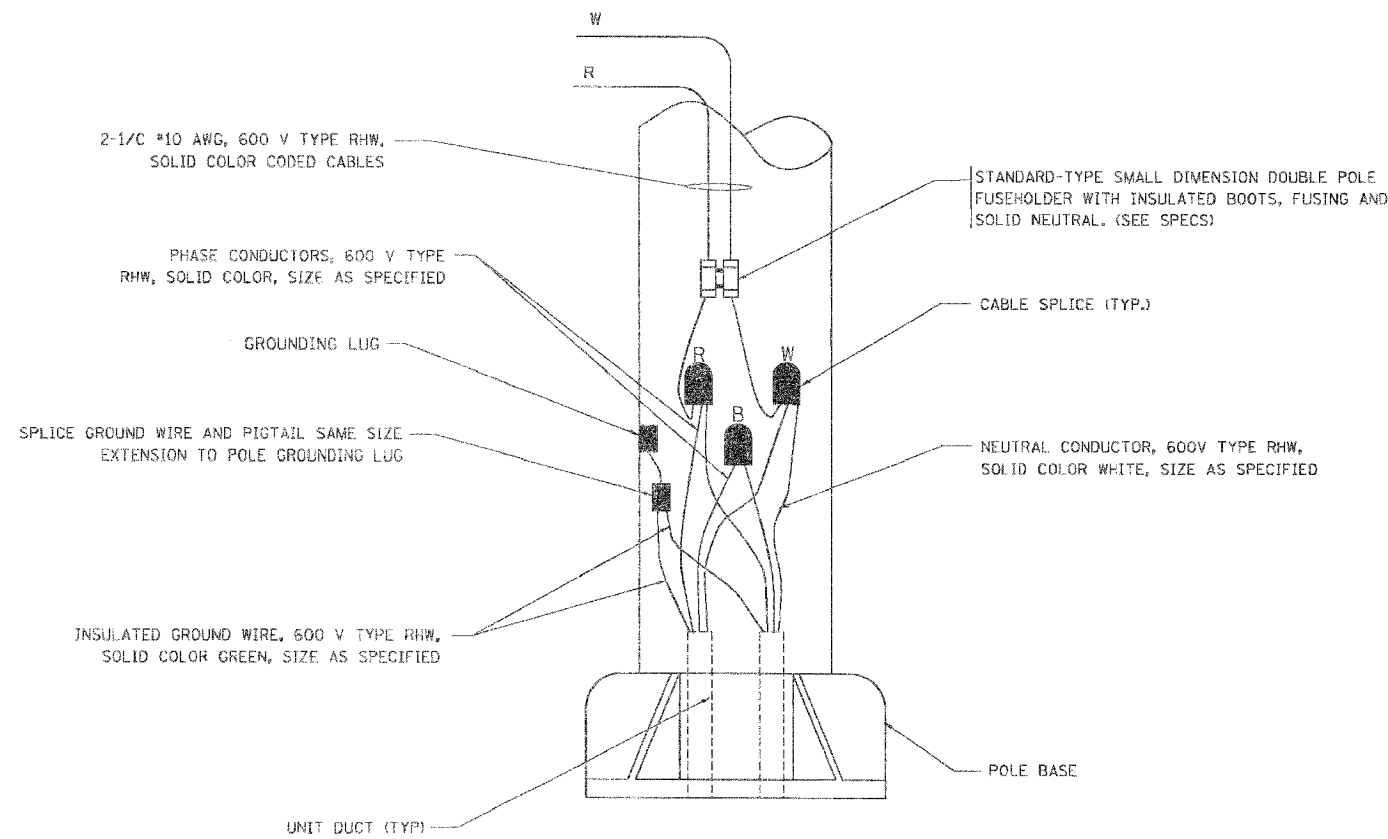
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2845	3152 WRS	COOK	195	137
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



TYPICAL SPLICE DETAIL
N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.



POLE WIRING DETAIL
N.T.S.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

MISC. ELECTRICAL DETAILS
SHEET A

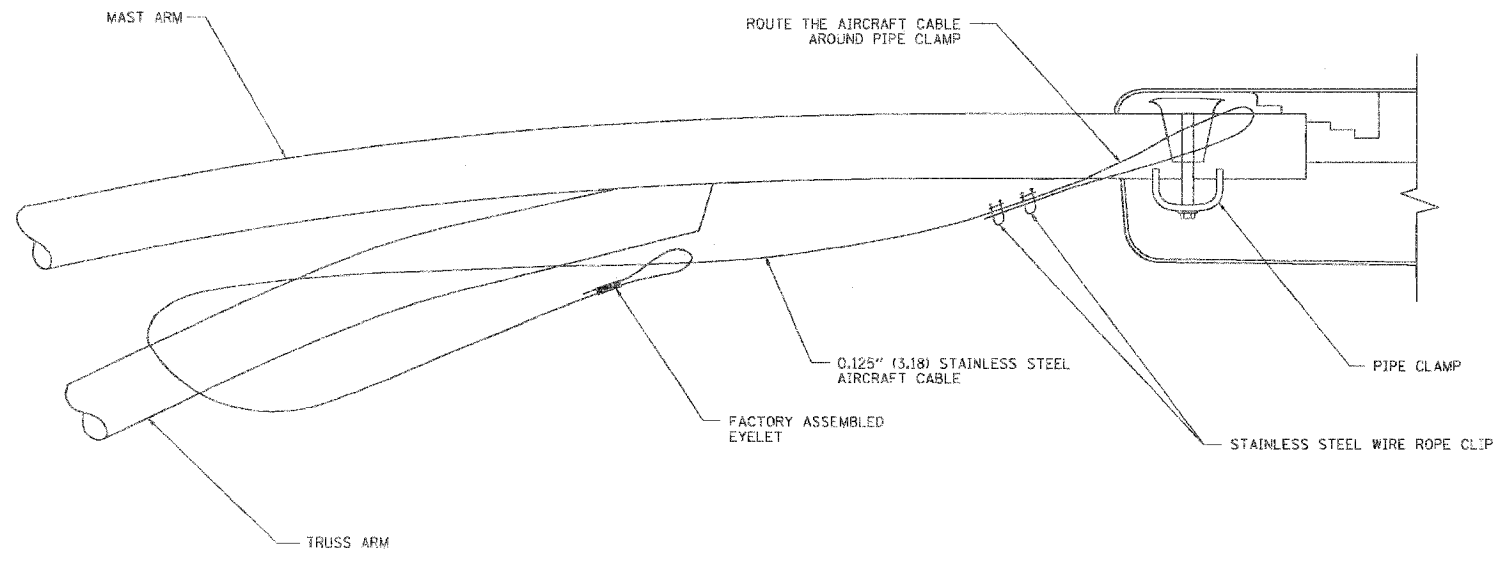
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HORIZ.
DATE: 1/18/2007

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BE-702

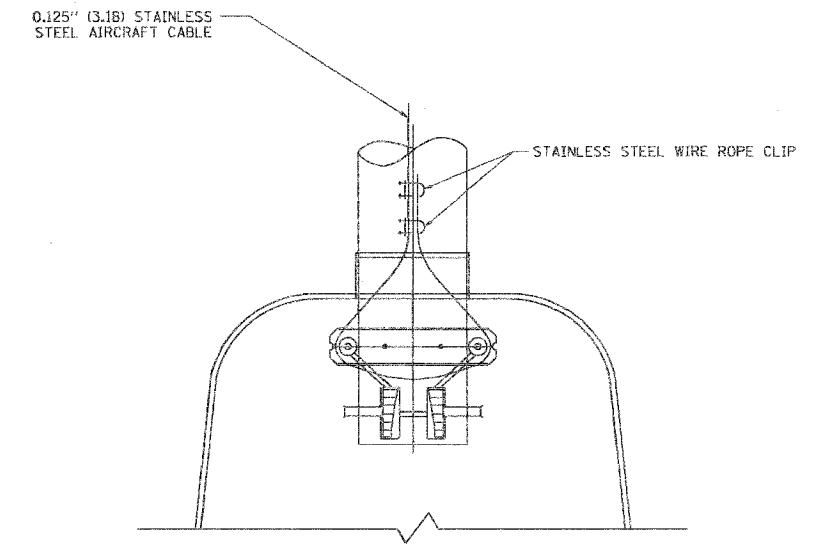
REVISION DATE: 01/01/07

PLT: DATE: 1/18/2007
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CSCR: NAME: B. B. B. / J. N.

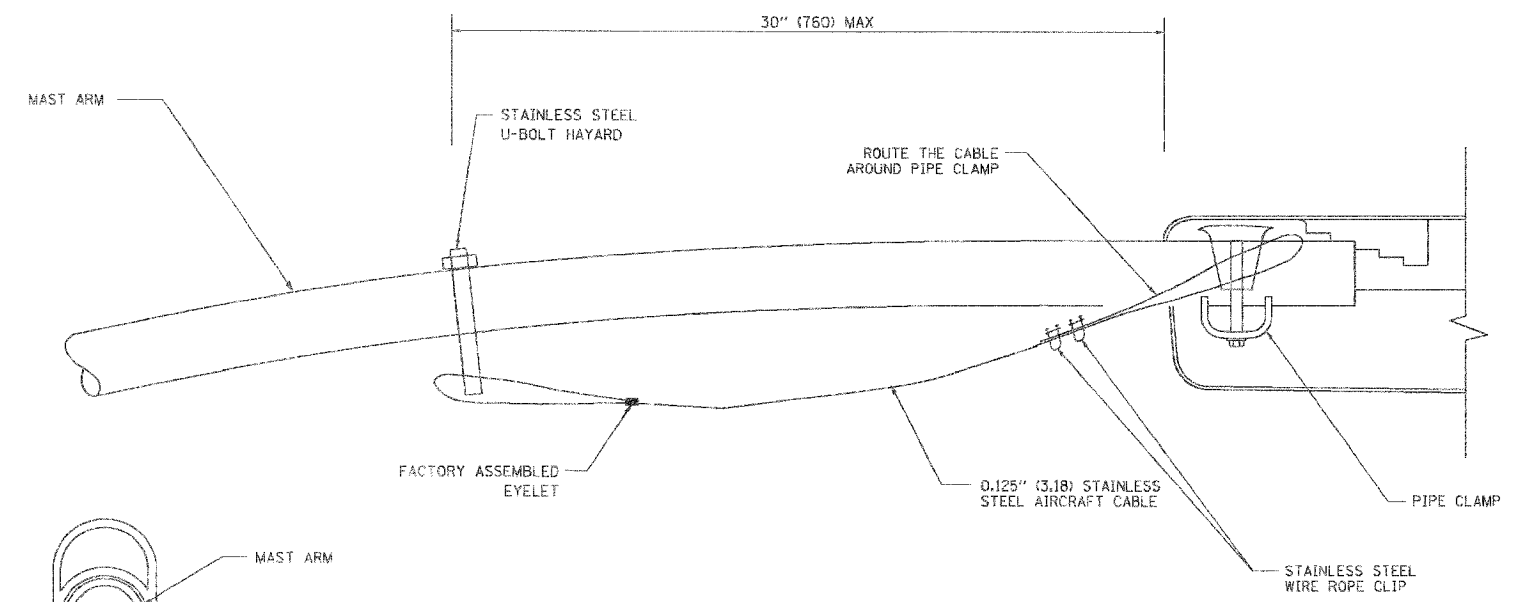
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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



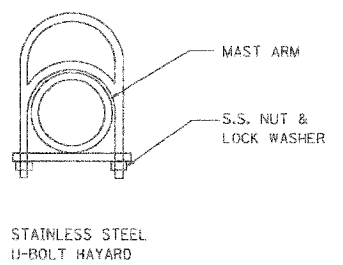
SIDE VIEW (TRUSS ARM)
N.T.S.



BOTTOM VIEW
N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)
N.T.S.



STAINLESS STEEL U-BOLT HAYARD

- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN
 2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
 3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL
 4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

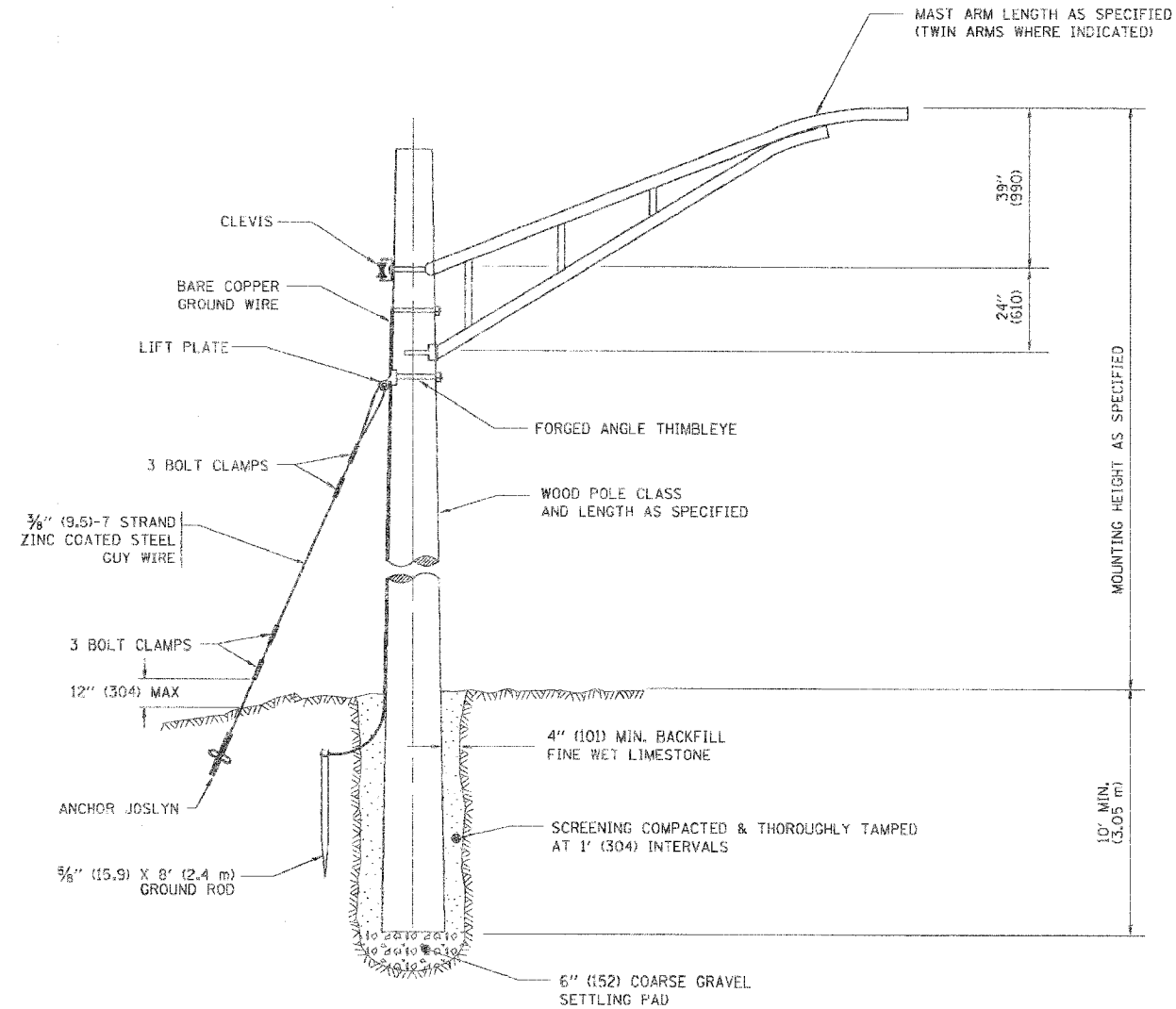
LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: VERT. HORIZ. DATE: 1/17/2007

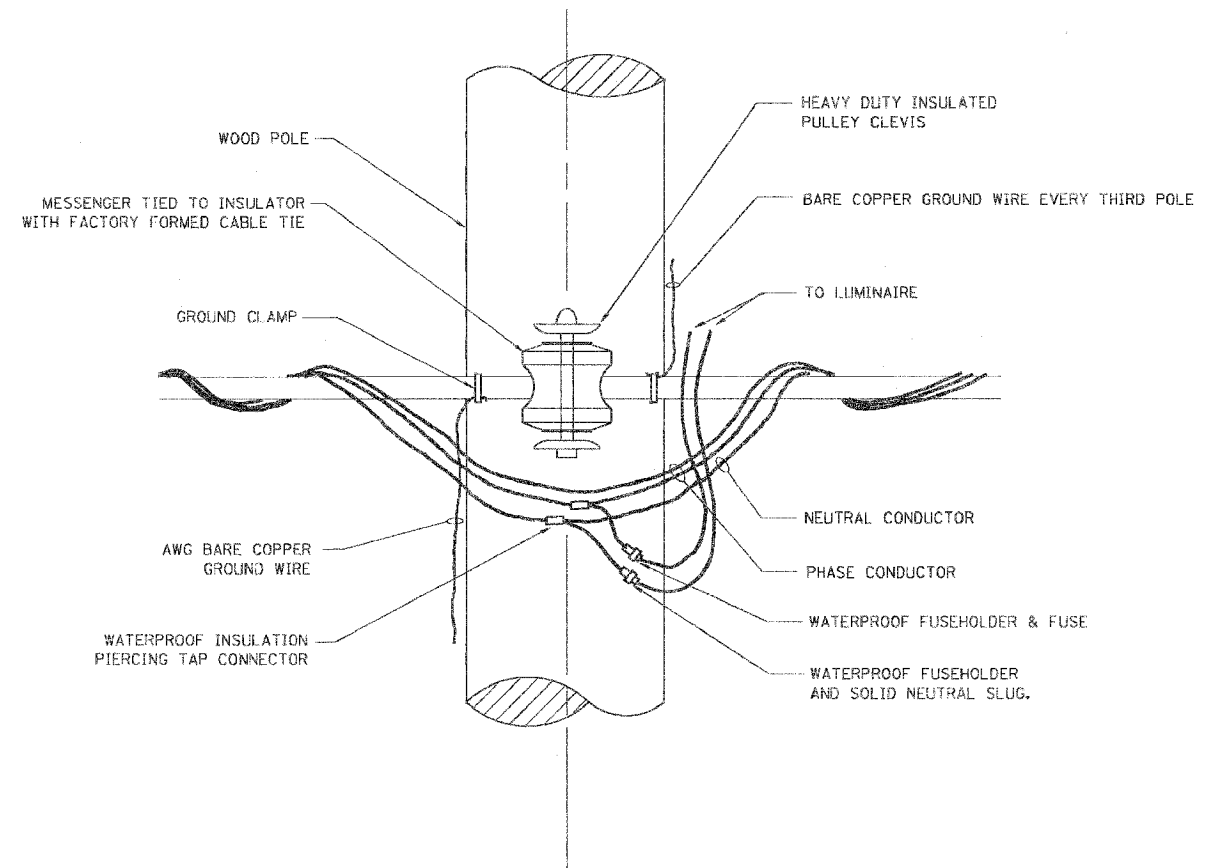
DRAWN BY CHECKED BY BE-701 REVISION DATE: 01/01/07

PLOT DATE: 1/17/2007
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	159
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

PLOT DATE: 1/17/2007
 FILE NAME: C:\Users\jw\Documents\2007\1/17/2007\1/17/2007.dwg
 USER NAME: jw

REVISIONS	
NAME	DATE

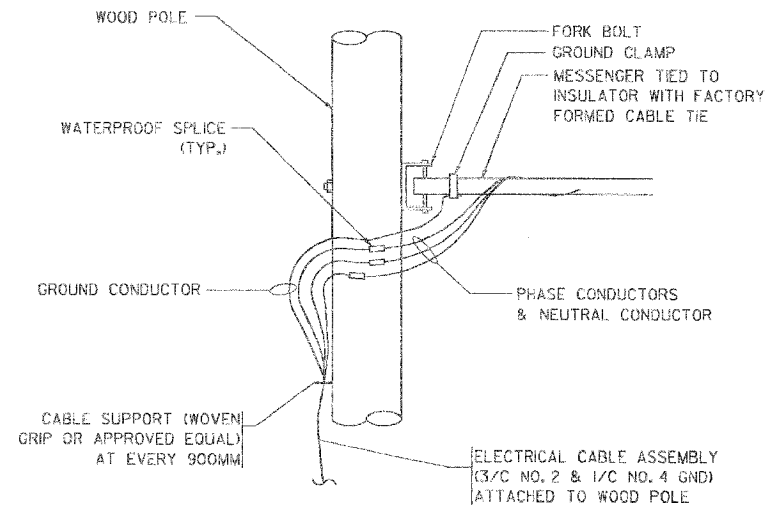
ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE
DETAILS

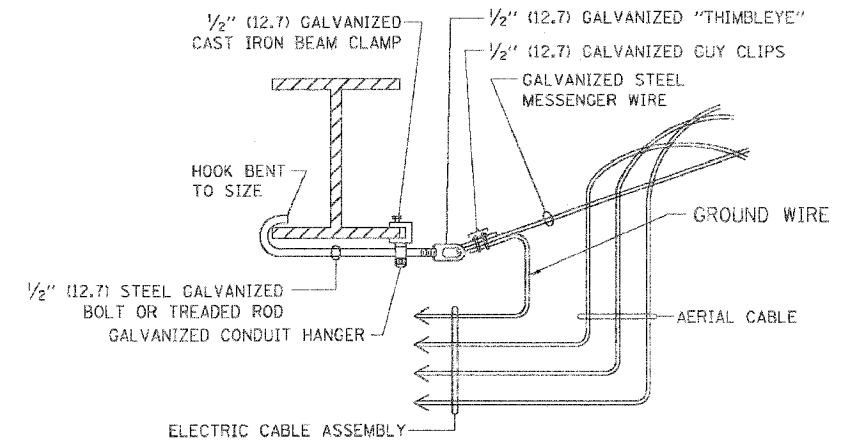
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HORIZ.
DATE: 1/17/2007

DRAWN BY
CHECKED BY
BE-800
REVISION DATE: 01/01/07

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	160
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



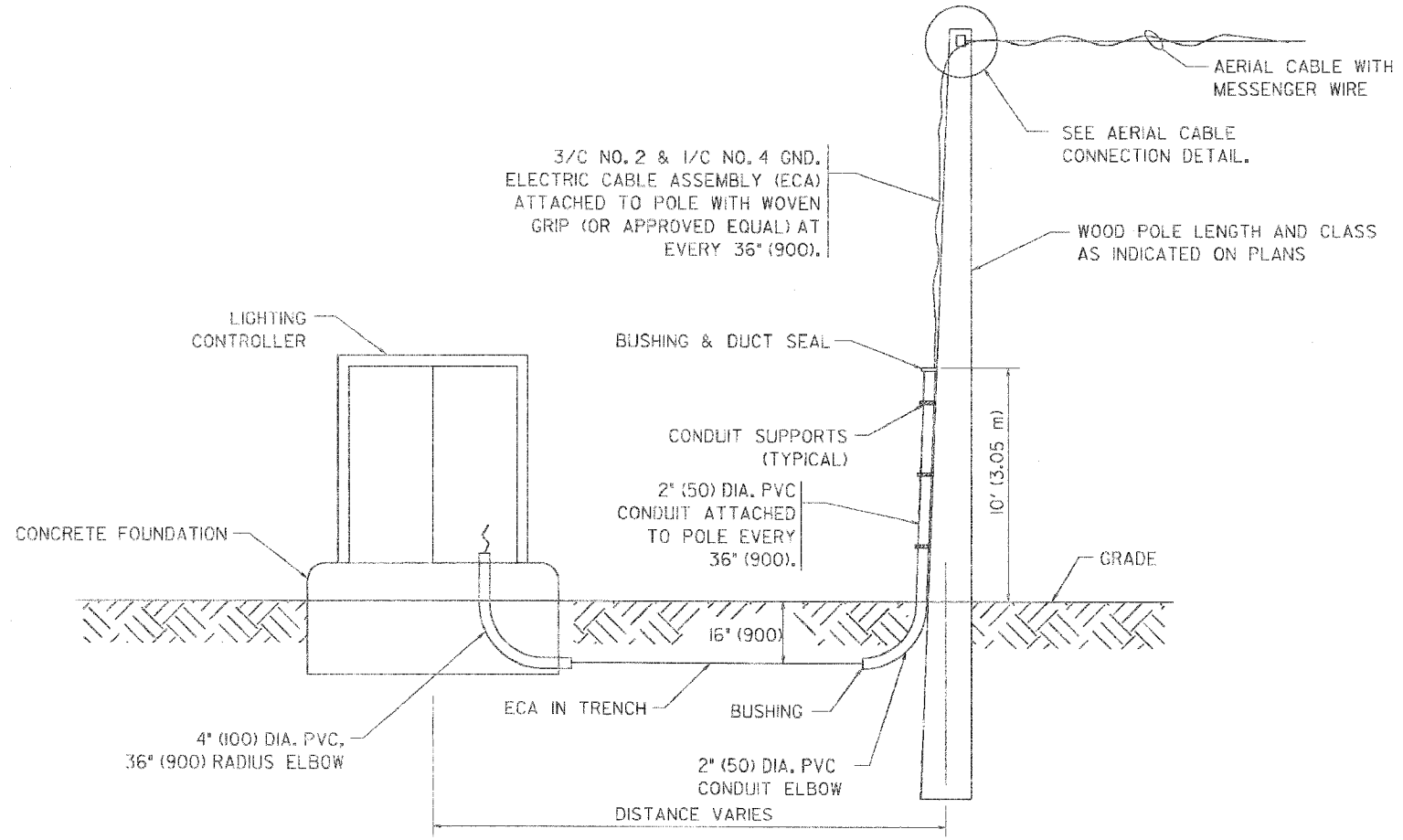
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

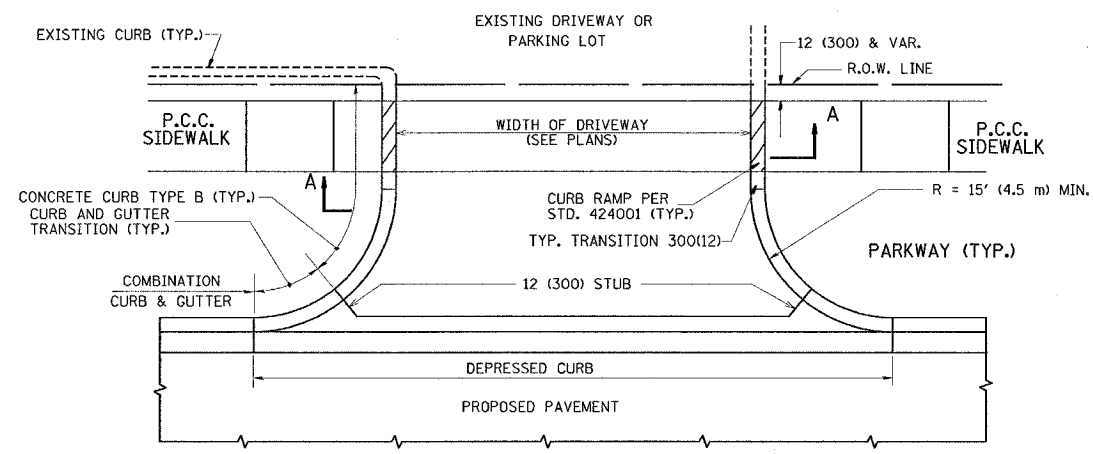


WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

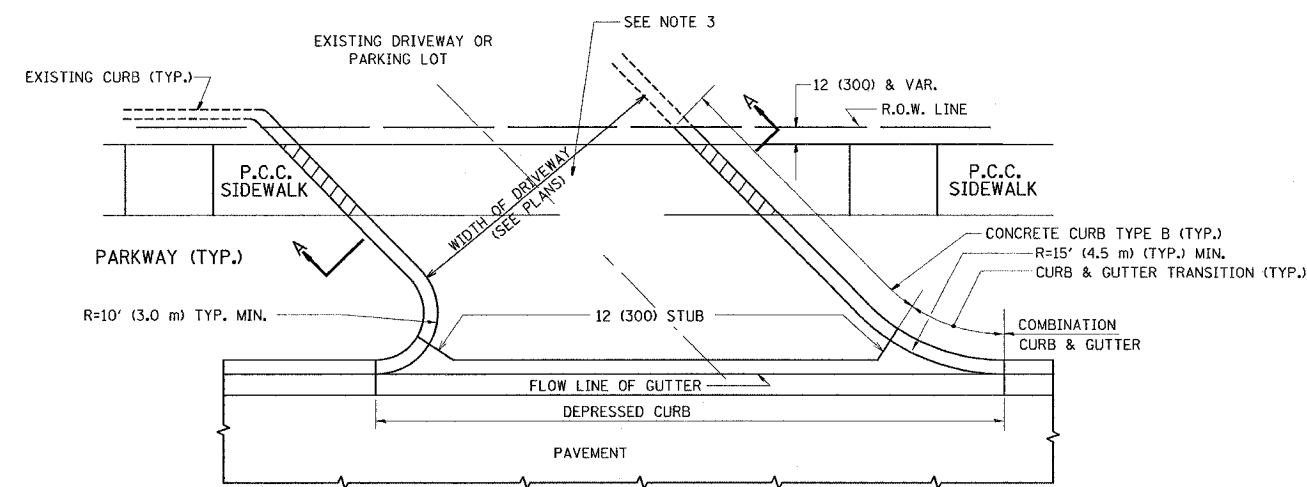
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
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PLOT DATE: 1/17/2007
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 USER NAME: jsteele

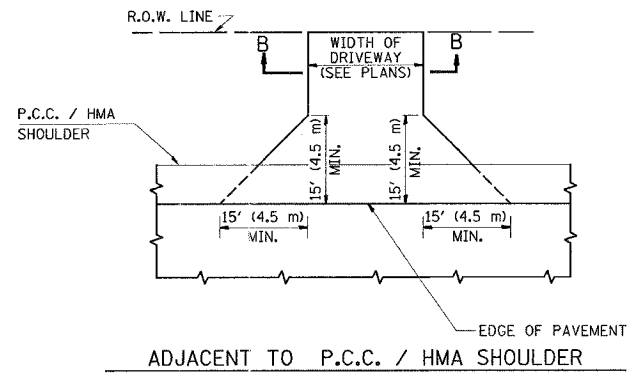
CONTRACT NO. 62742				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	161
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



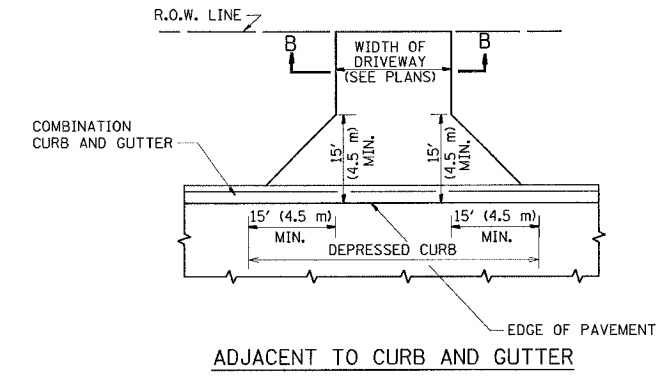
WITH CONCRETE CURB, TYPE B



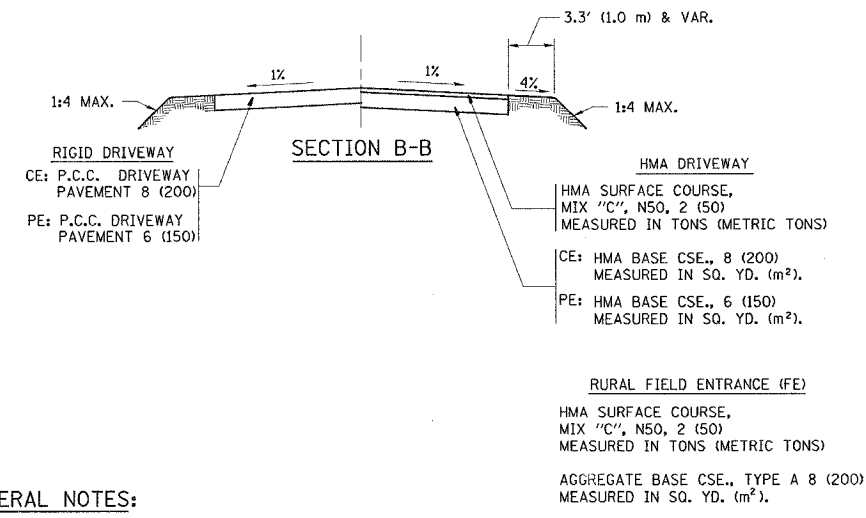
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

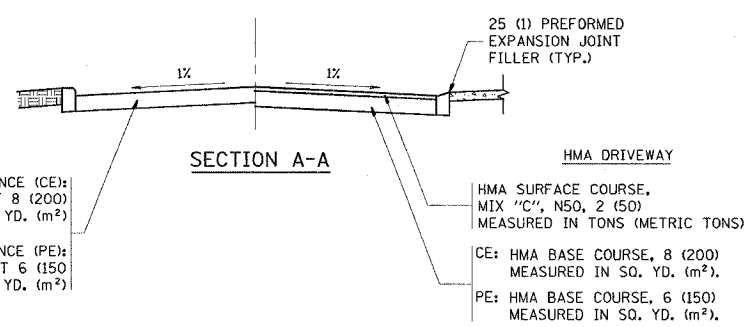
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

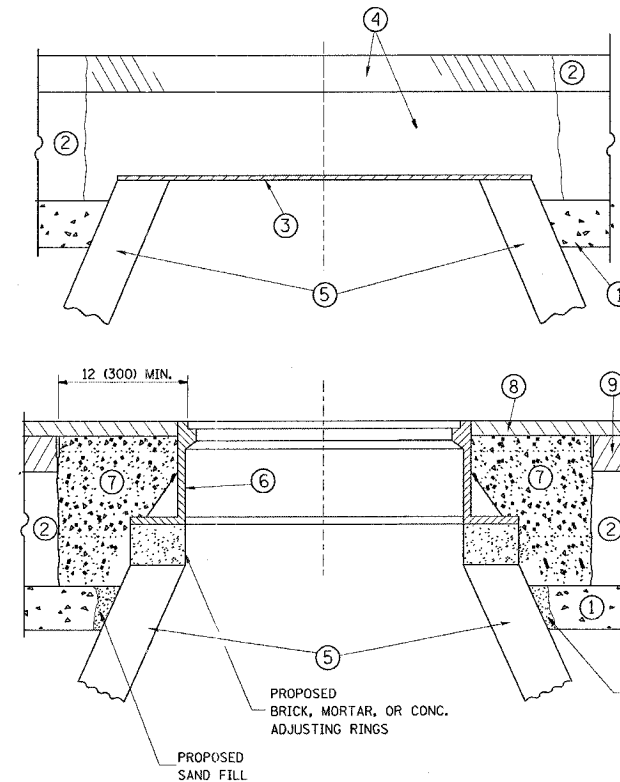
REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LaFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
DISTANCE BETWEEN R.O.W. AND
FACE OF CURB & EDGE OF
SHOULDER >= 15' (4.5 m)

SCALE: VERT. NONE
 HORIZ. 1" = 20'
 PLOT DATE: 7/2/2007
 DRAWN BY
 CHECKED BY

PLOT DATE = 7/2/2007
 FILE NAME = P:\advised\bd01.dgn
 PLOT SCALE = 56.00000 / IN.
 USER NAME = gml\amerfp

CONTRACT NO. 62742				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	162
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"
NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

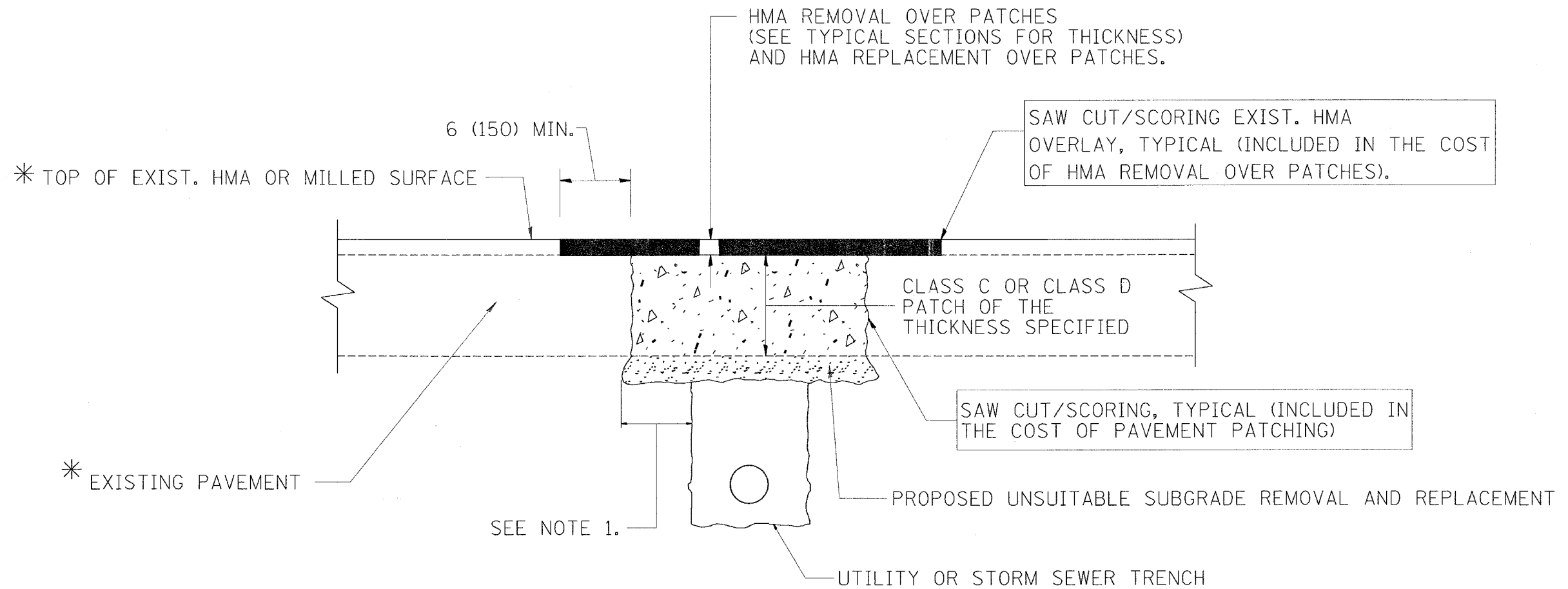
SCALE: VERT. NONE
HORIZ. NONE
PLOT DATE: 7/2/2007

DRAWN BY
CHECKED BY

BD600-03 (BD-8)
REVISION DATE: 01/01/07

PLOT DATE = 7/2/2007
FILE NAME = P:\adirect\bd600.dgn
PLOT SCALE = 50.0000 / IN.
USER NAME = gullbomefp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	163
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

NOTES:

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE FULL DEPTH PATCHES
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	03/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98
R. BORO	01/01/07

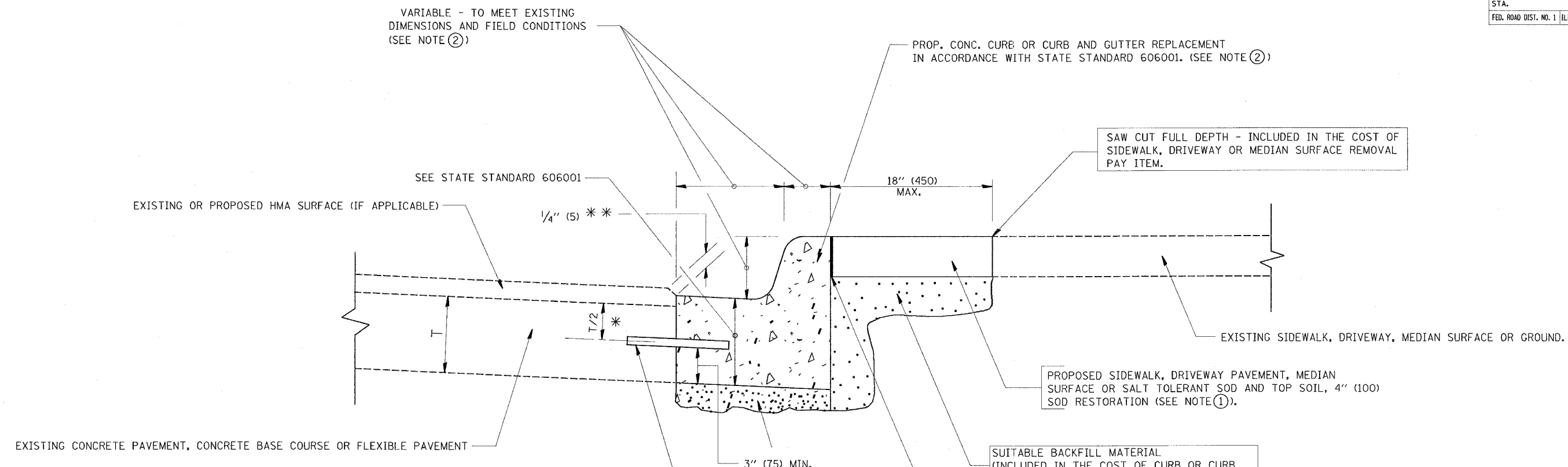
ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SCALE: VERT. NONE
 HORIZ. NONE
 PLOT DATE: 7/2/2007

DRAWN BY
 CHECKED BY

PLOT DATE = 7/2/2007
 FILE NAME = PAVEMEN04BD22.dgn
 PLOT SCALE = 50.0000 / IN.
 USER NAME = gullonefep

CONTRACT NO. 62742				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	164
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

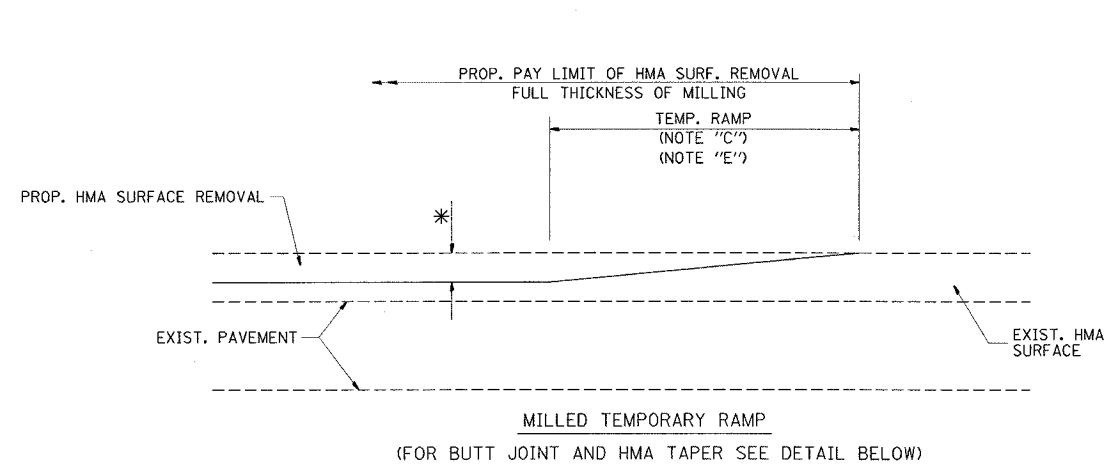
SCALE: VERT. NONE
HORIZ. 1" = 10'
PLOT DATE: 7/2/2007
DRAWN BY
CHECKED BY
BD600-06 (BD-24)

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

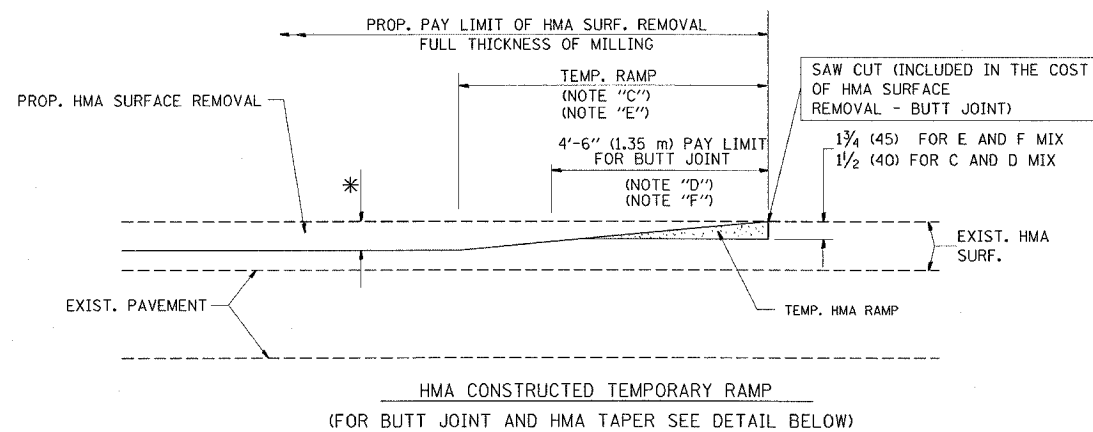
PLOT DATE = 7/2/2007
PLOT SCALE = 1/4" = 1'-0"
USER NAME = gullamfep

REVISION DATE: 01/01/07

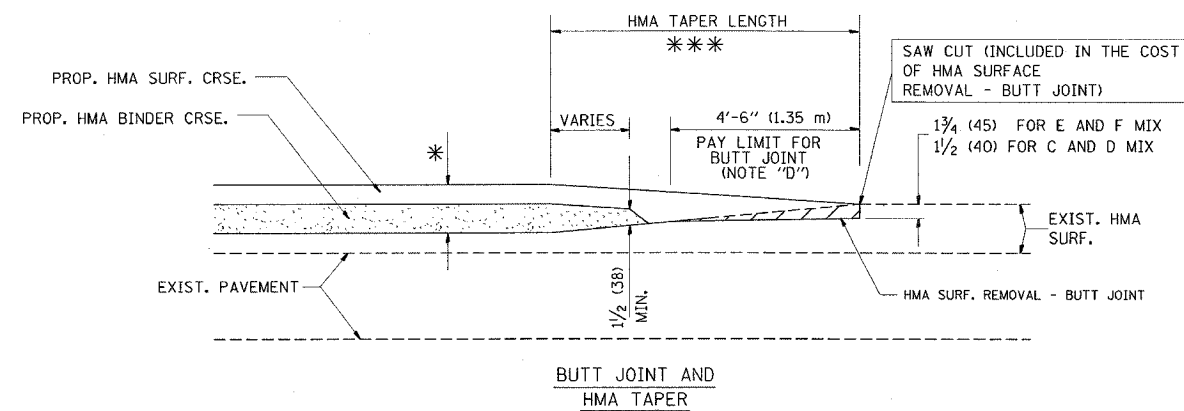
CONTRACT NO. 62742				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	165
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



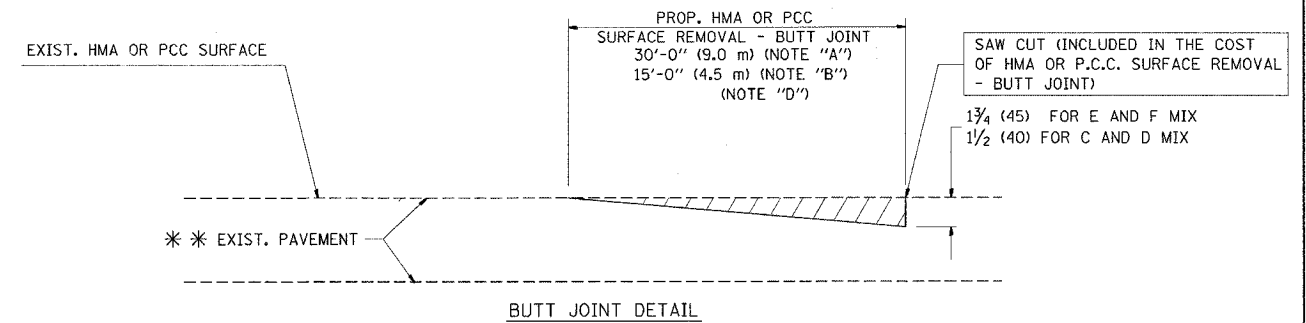
OPTION 1



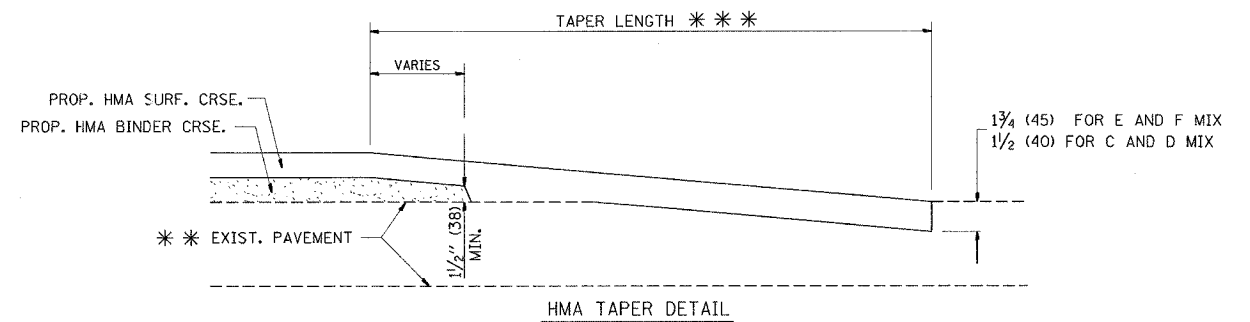
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

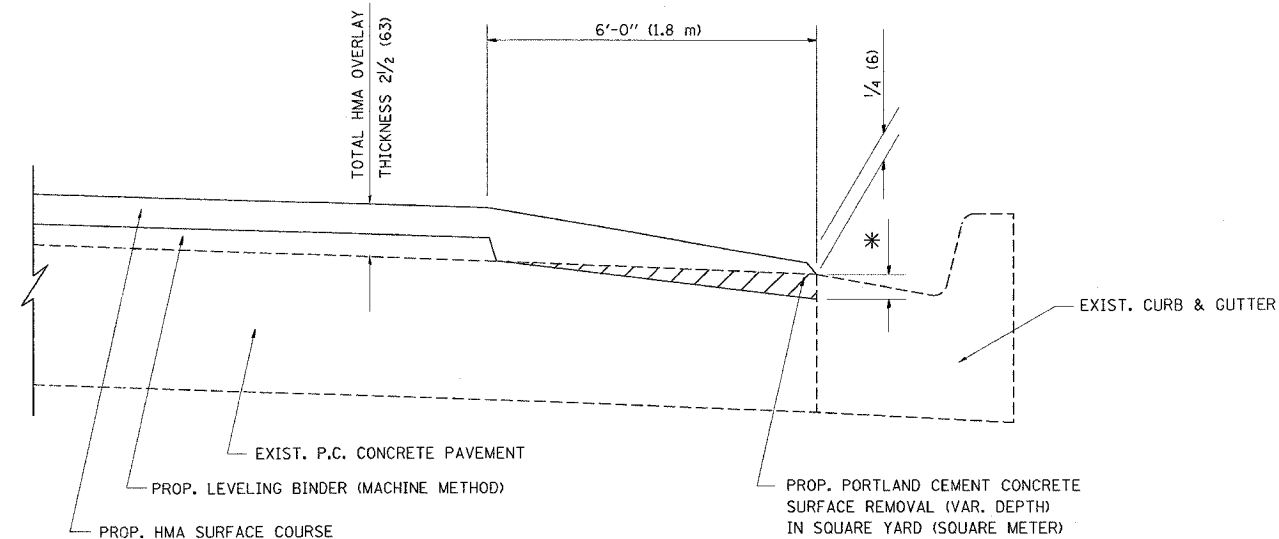
SCALE: VERT. NONE
HORIZ. NONE
PLOT DATE: 1/2/2007

DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)
REVISION DATE: 01/01/07

CONTRACT NO. 62742

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	166
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



HMA TAPER AT
EDGE OF P.C.C. PAVEMENT

HMA SURFACE	LEVELING BINDER	MIX	THICKNESS	THICKNESS	* MILLING AT GUTTER FLAG
C OR D	1 1/2 (38)	1 (25)	1 1/2 (38)	1 (25)	1/4 (33)
F	1 3/4 (44)	3/4 (19)	1 3/4 (44)	3/4 (19)	1/2 (38)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	09/10/94
R. SHAH	10/25/94
A. ABBAS	05/05/99
E. GOMEZ	12/21/00
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

HMA TAPER AT
EDGE OF P.C.C. PAVEMENT

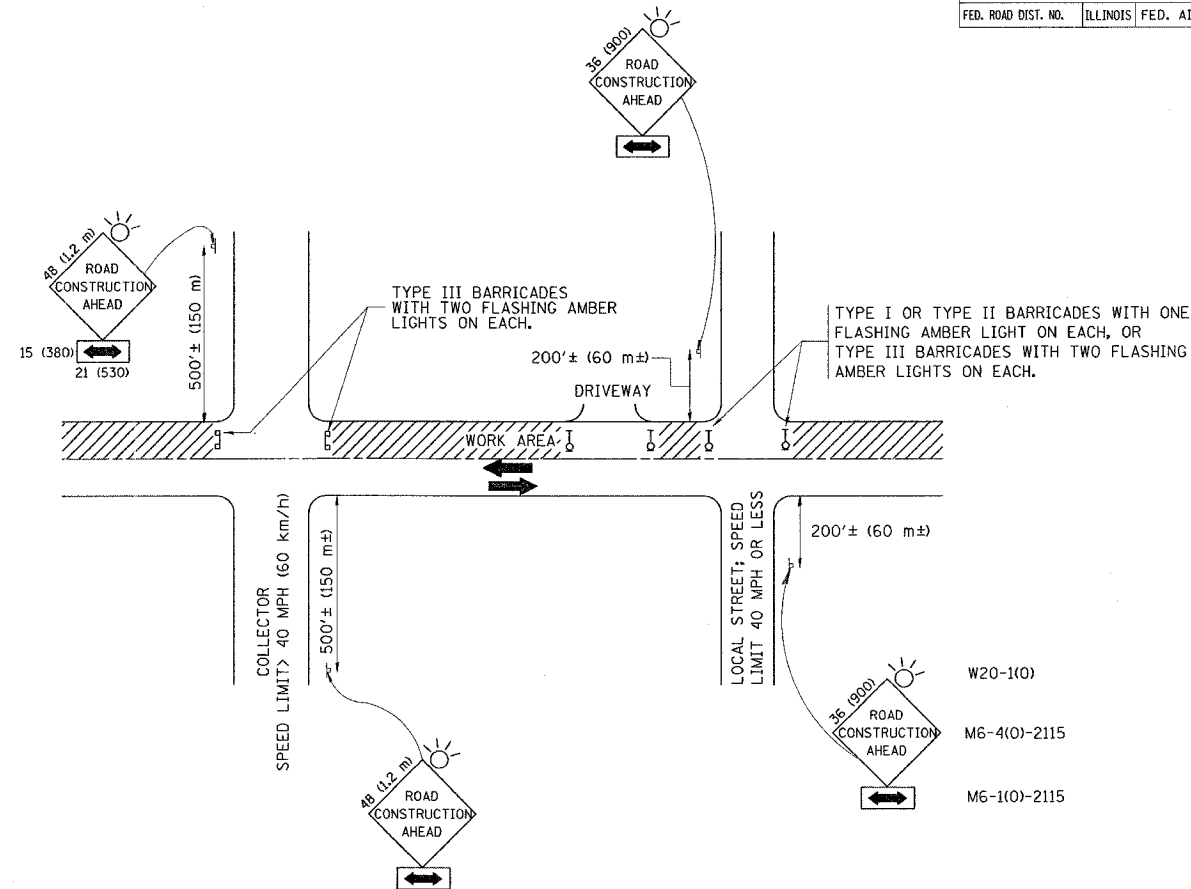
SCALE: VERT. NONE
HORIZ. NONE
PLOT DATE: 7/2/2007

DRAWN BY jls
CHECKED BY A. ABBAS

BD400-06 (BD33)
REVISION DATE: 01/01/07

PLOT DATE = 7/2/2007
FILE NAME = P:\projects\bd33.dgn
USER NAME = gullibonerp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	167
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS:
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

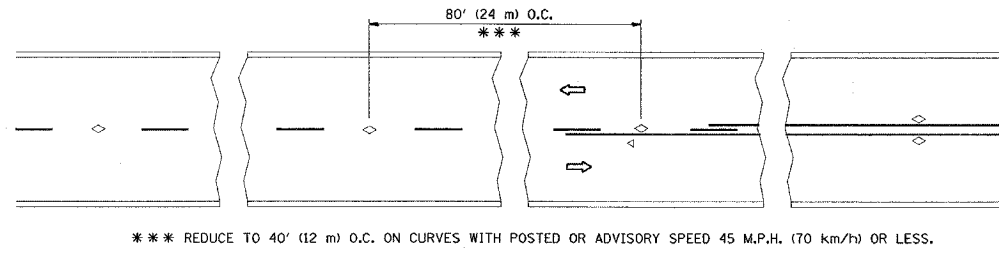
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS

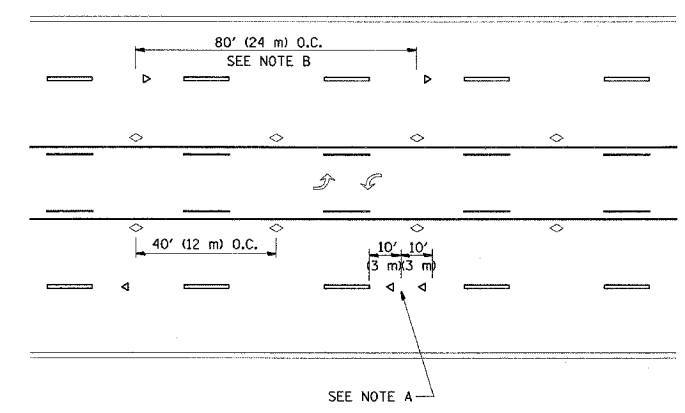
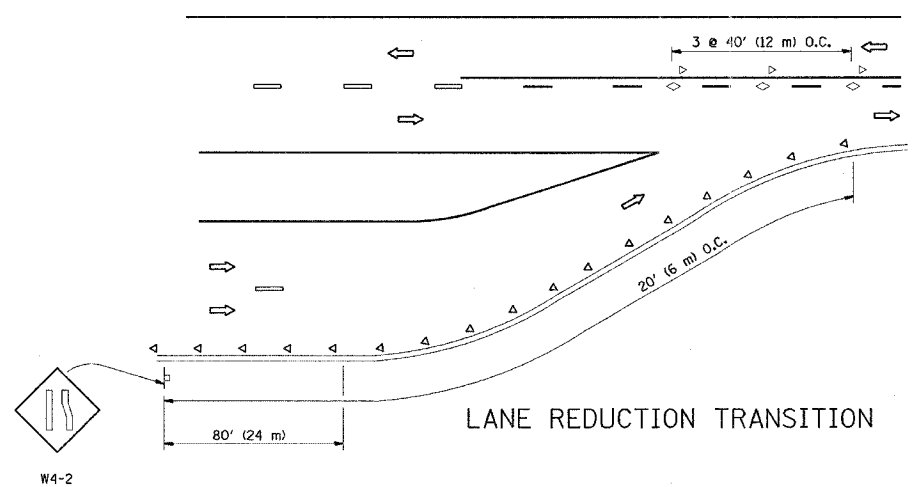
SCALE:
DATE: 7/2/2007

DRAWN BY
CHECKED BY
TC-10

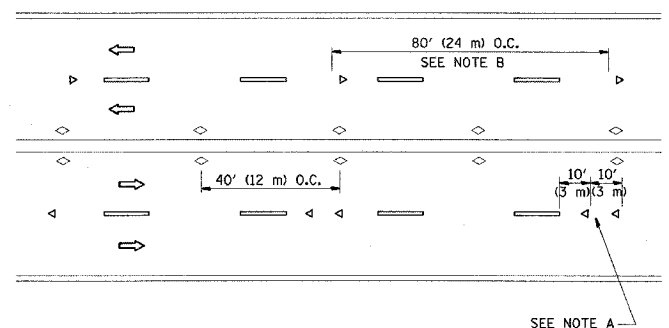
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	168
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



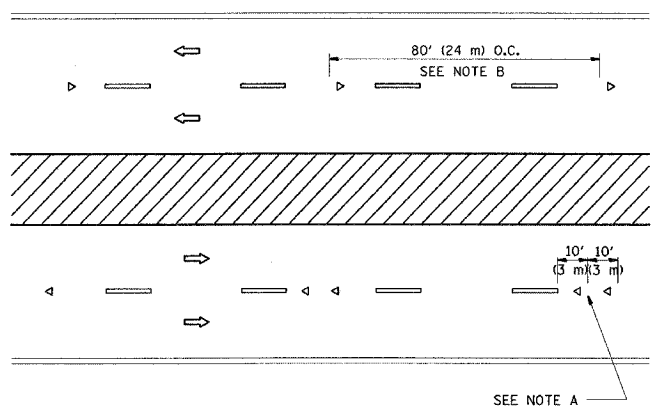
TWO-LANE/TWO-WAY



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (60 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

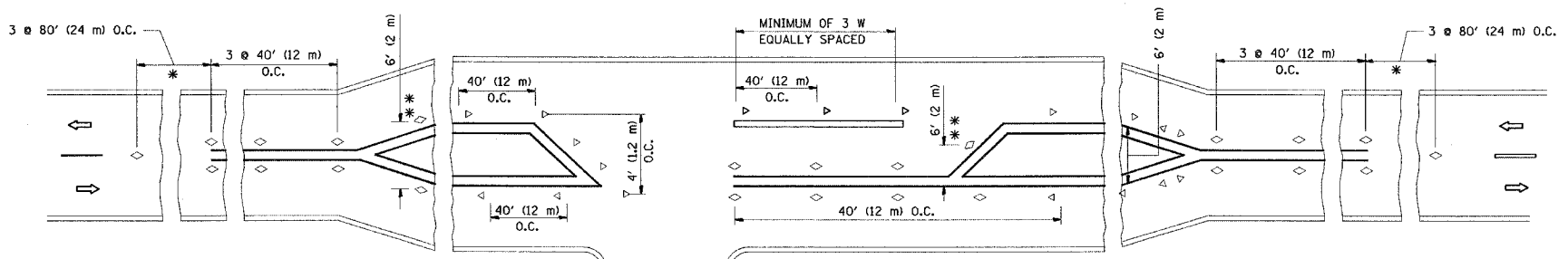
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

All dimensions are in millimeters (Inches) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

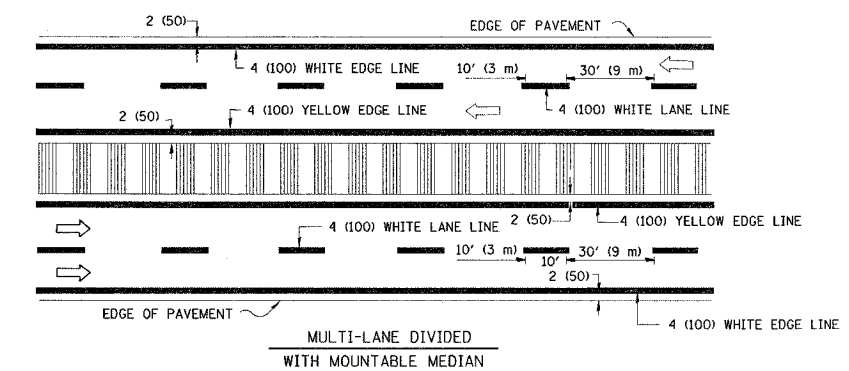
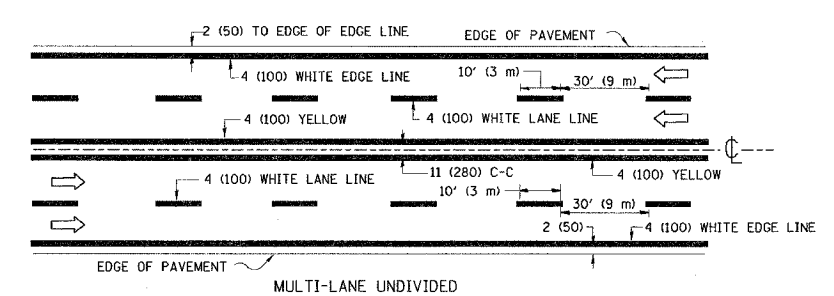
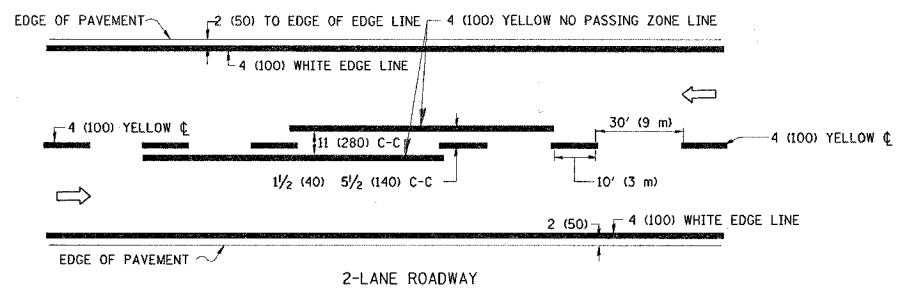
ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE
DATE: 7/2/2007

DRAWN BY CADD
CHECKED BY
TC-11

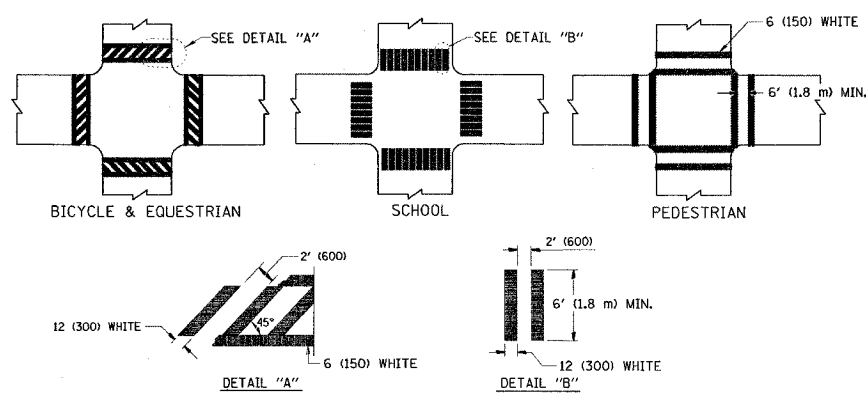
ADDED SHEET REV. 2/23/07 FG

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PLOT SCALE = 50:000 / 1"
USER NAME = gnttammach

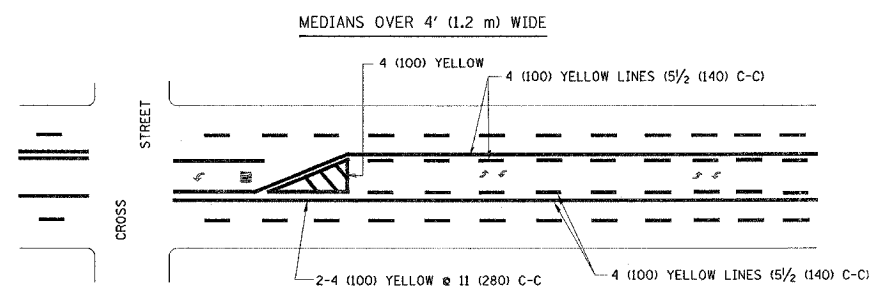
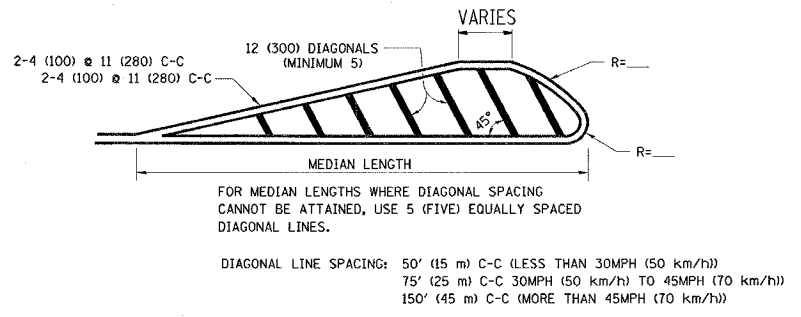
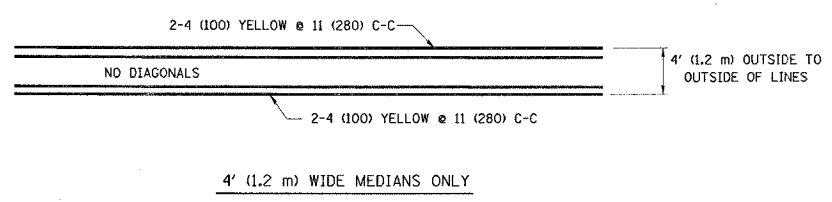


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

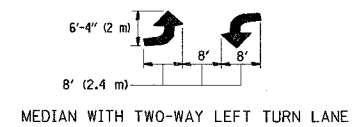
TYPICAL LANE AND EDGE LINE MARKING



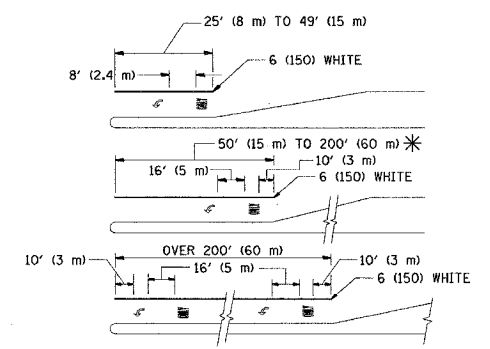
TYPICAL CROSSWALK MARKING



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



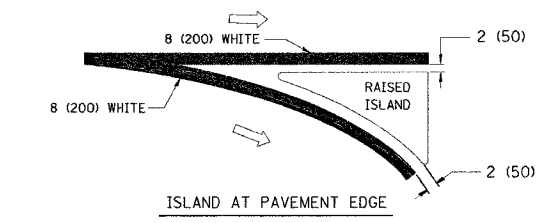
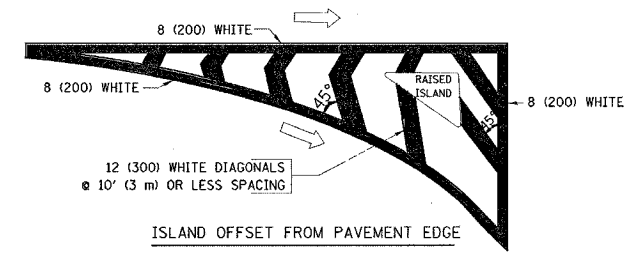
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

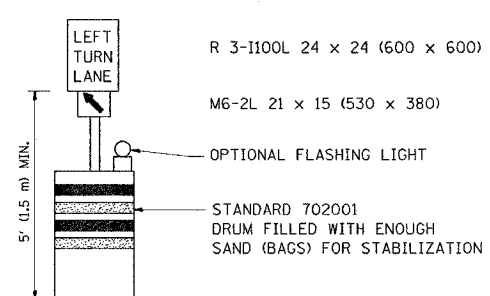
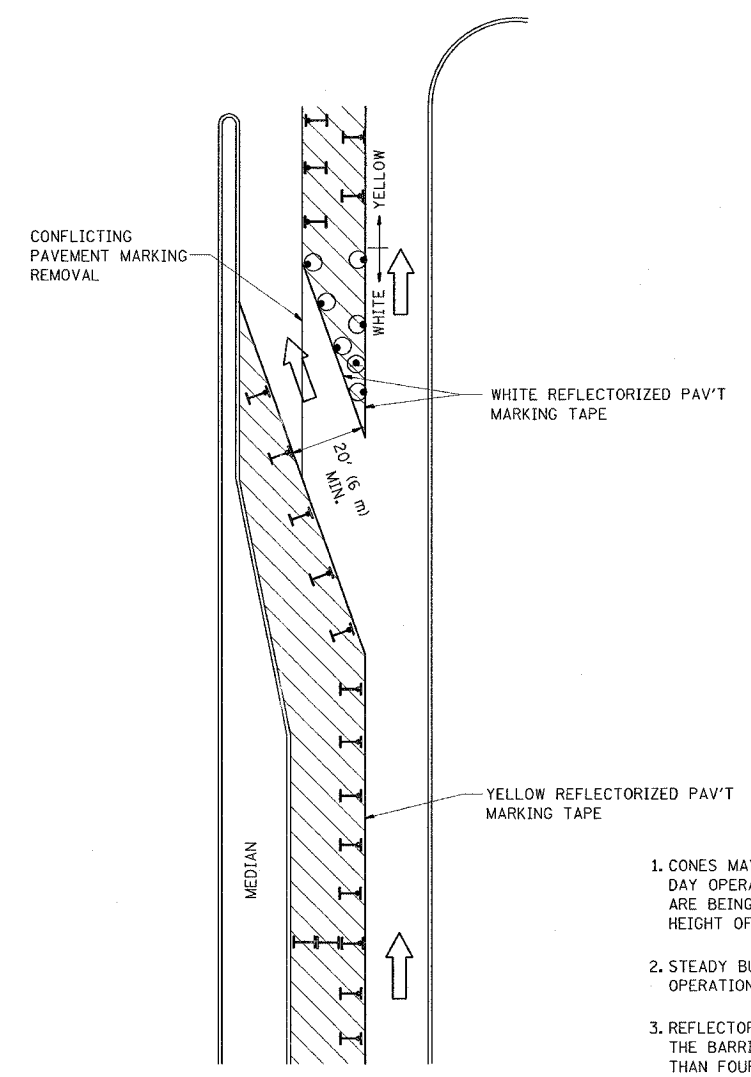
All dimensions are in millimeters (inches) unless otherwise shown.

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DATE: 7/2/2007
 DRAWN BY CADD
 CHECKED BY

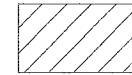





F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	170
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

All dimensions are in millimeters (inches) unless otherwise shown.

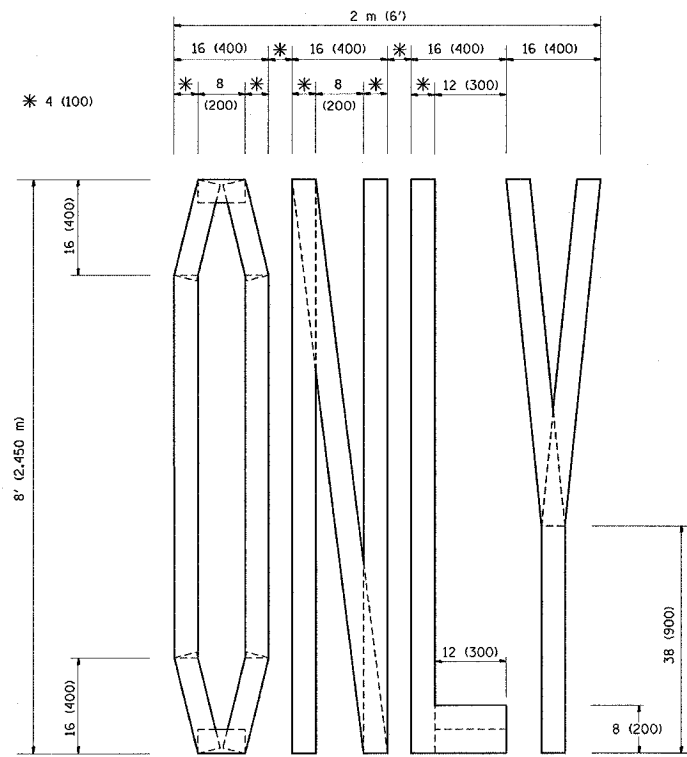
REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL AND PROTECTION
 AT TURN BAYS
 (TO REMAIN OPEN TO TRAFFIC)**

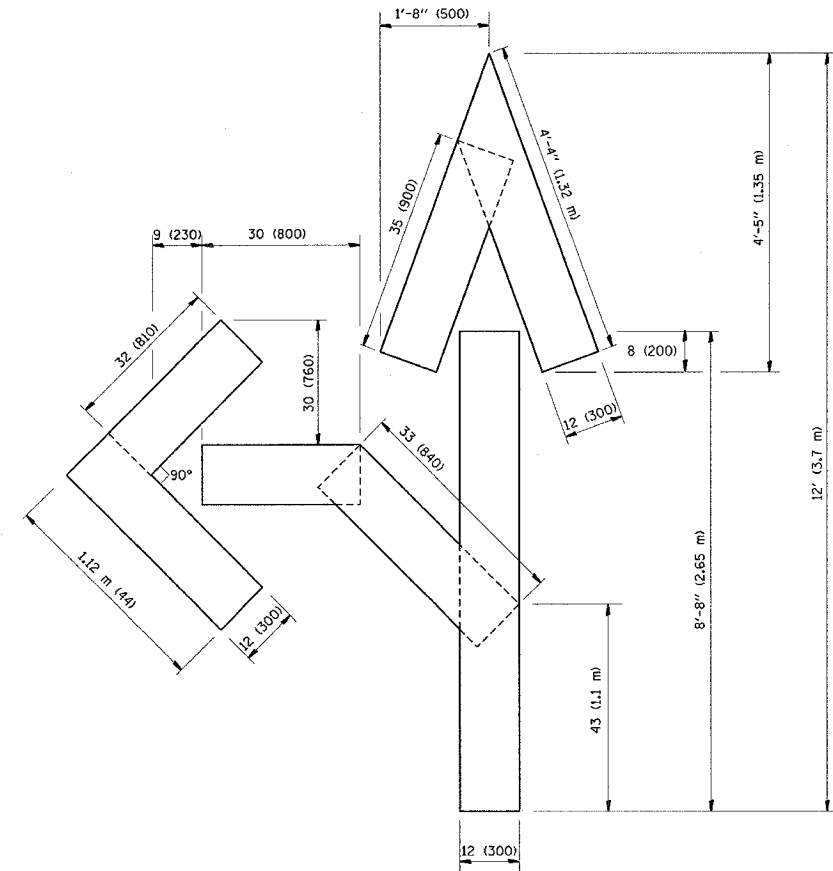
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 DRAWN BY
 CHECKED BY LHA

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 USER NAME = gullbunnefp

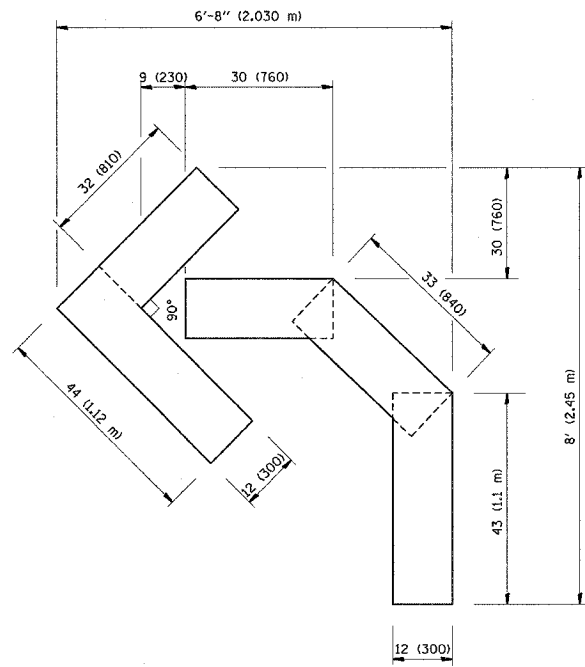
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	171
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in millimeters (Inches) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

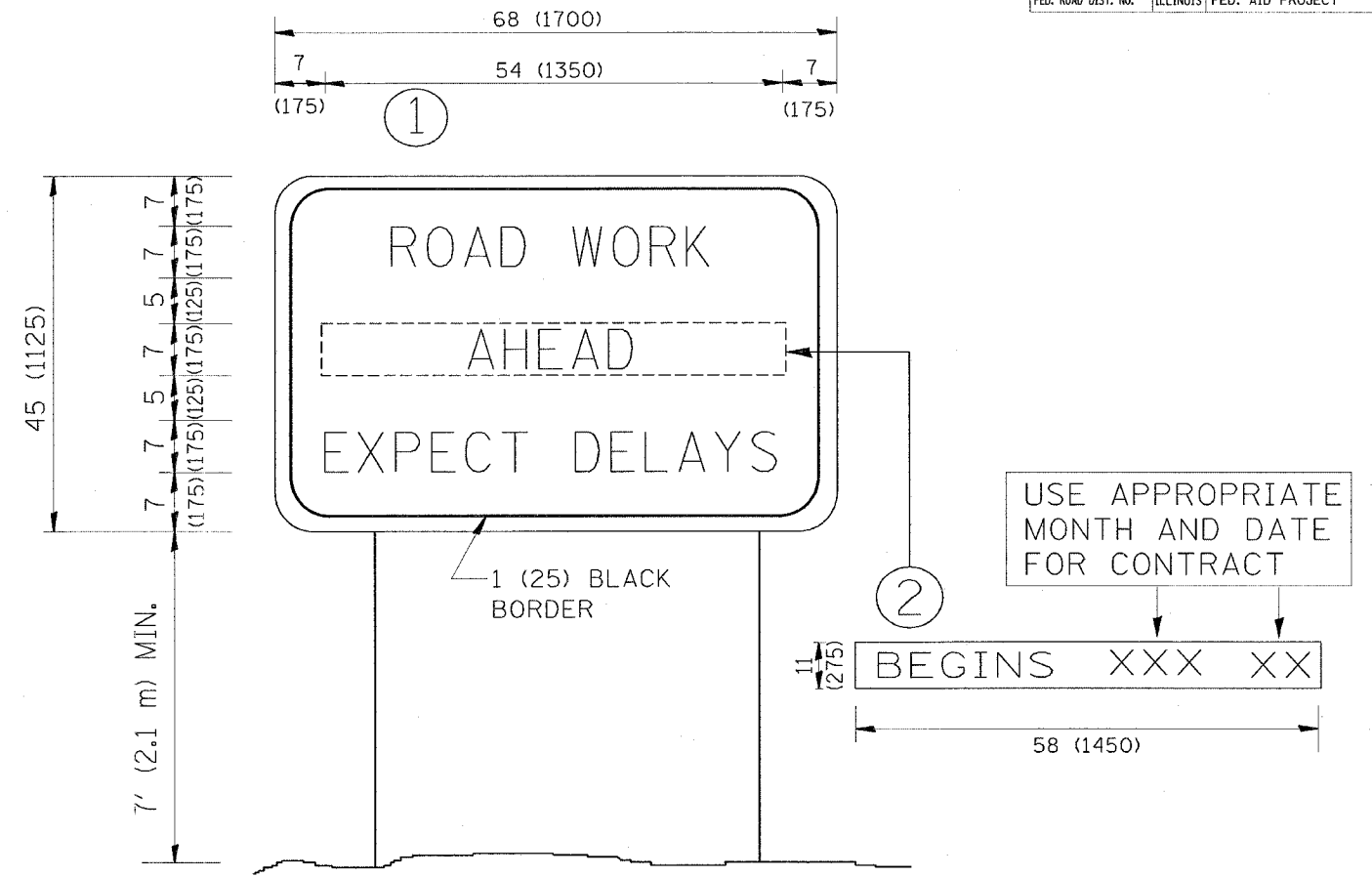
SCALE: NONE
 DATE: 7/2/2007

DRAWN BY CADD
 CHECKED BY

TC-16

REVISION DATE: 08/28/00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	172
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

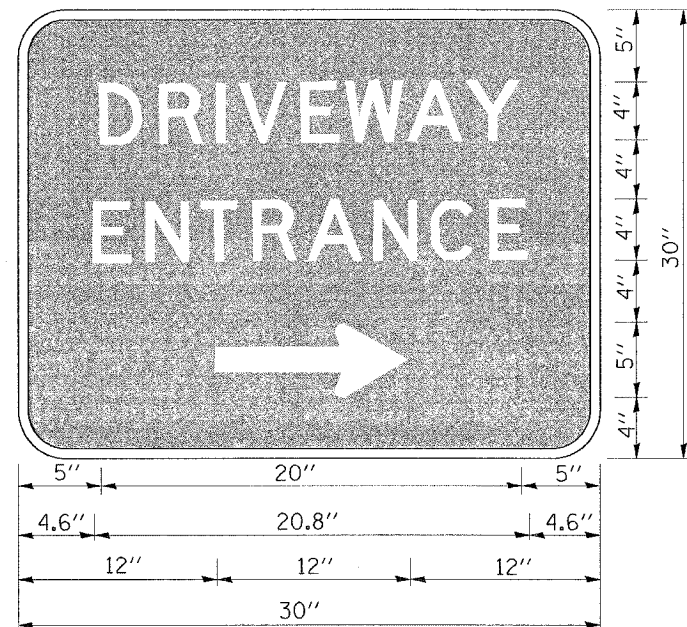
ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE

DRAWN BY DESIGN
CHECKED BY

TC22

F.A.W. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	173
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

PLOT DATE = 7/2/2007
 PLOT SCALE = 50.0000
 USER NAME = abba-s

REVISIONS	
NAME	DATE
C. JUXTUS	02/15/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

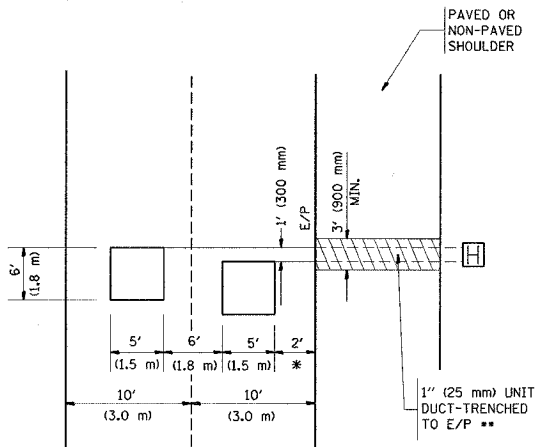
SCALE: NONE
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DRAWN BY R.H.
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	174
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

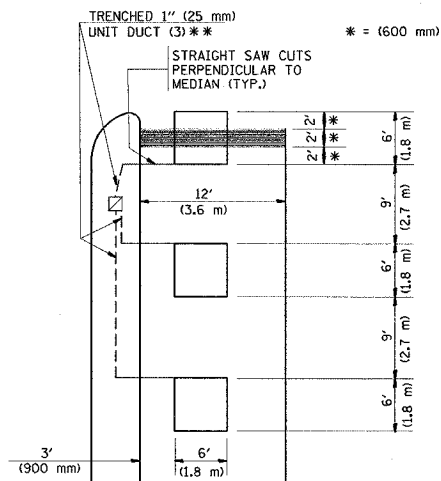


* = (600 mm)

** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

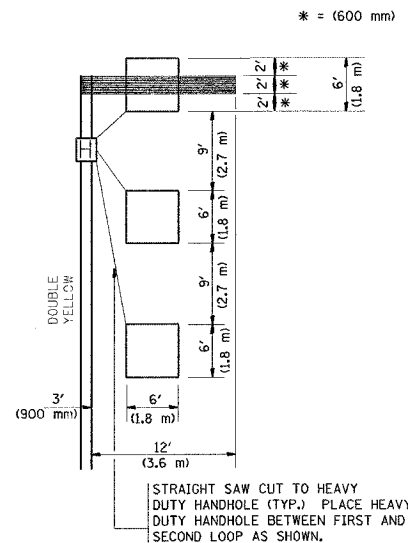
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

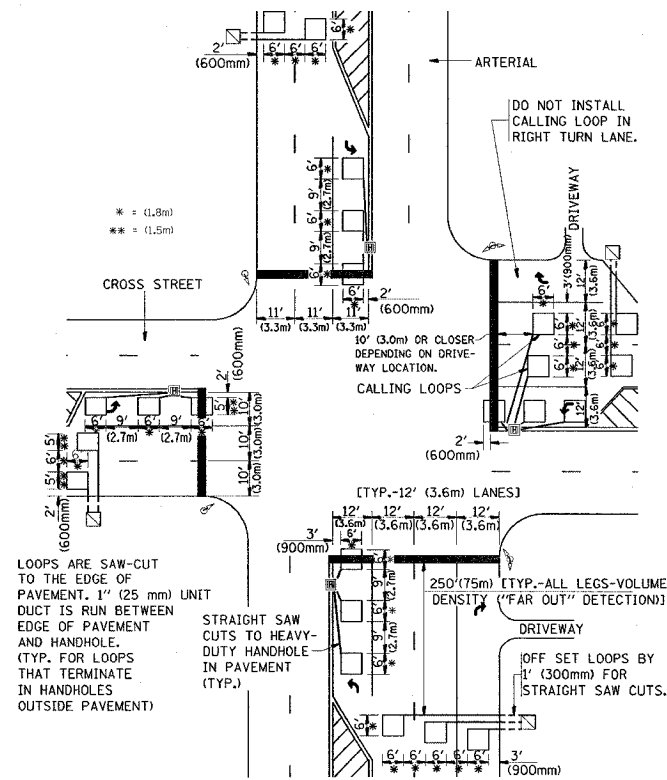
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)



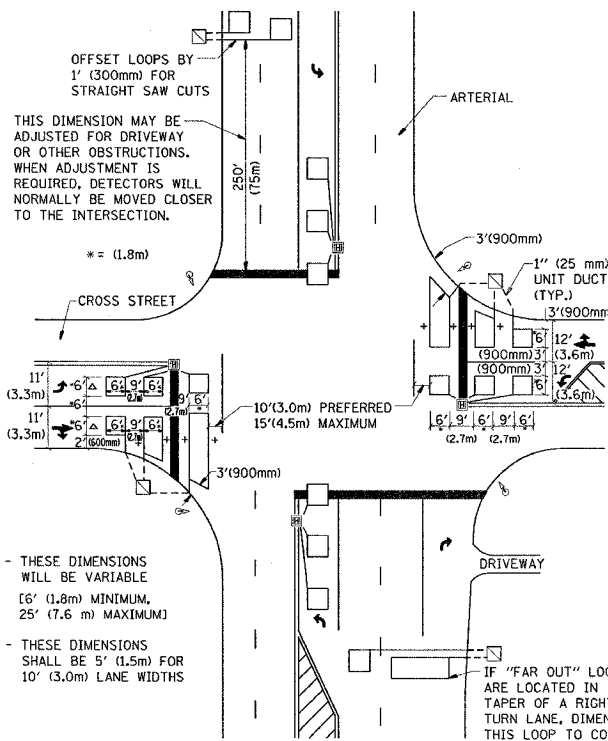
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)



DETAIL 1
N.T.S.

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DETAIL 2
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING

DESIGNED BY
DRAWN BY CADD
CHECKED BY R.K.F.
TSOT

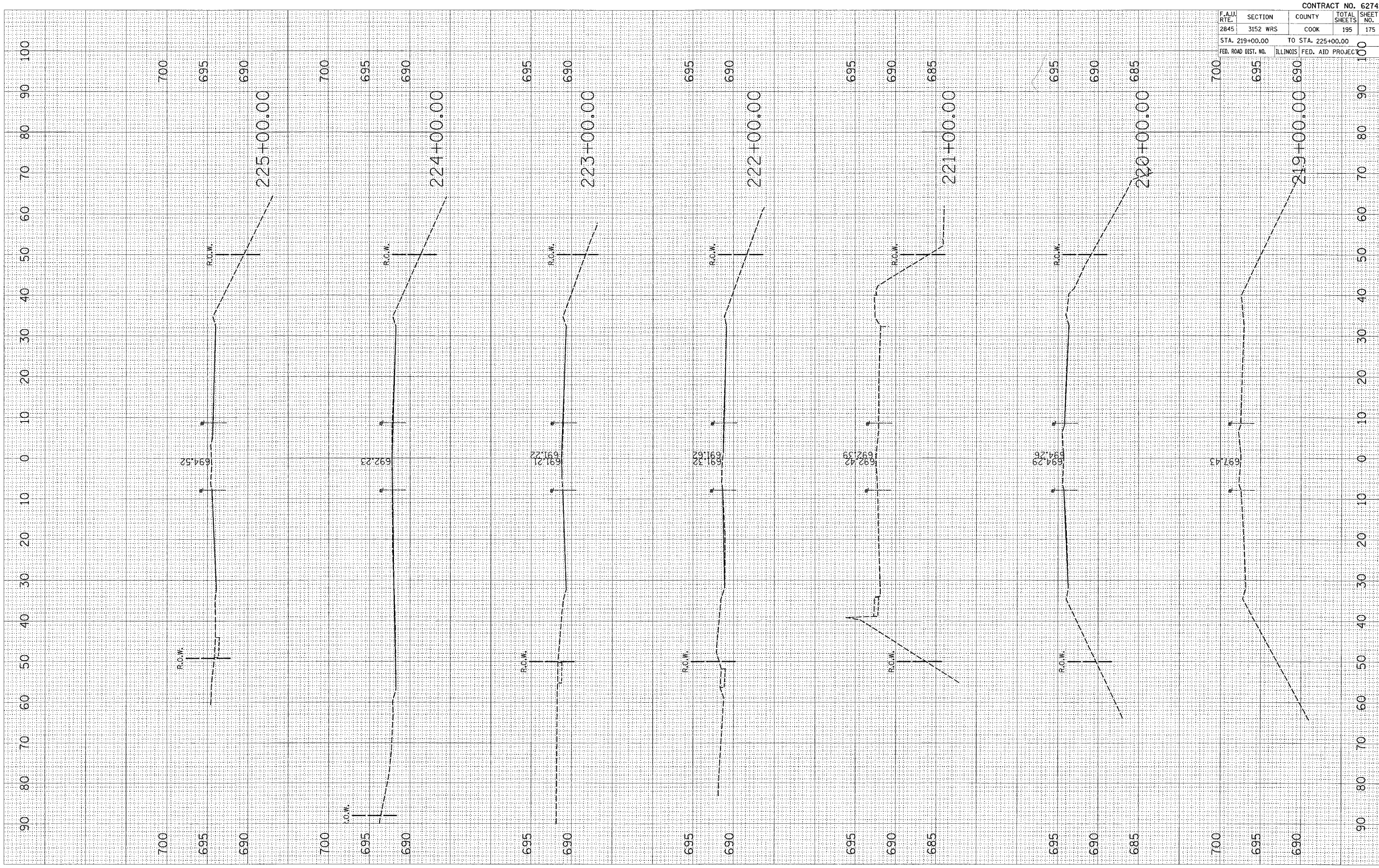
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REVISION DATE:

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8" = 100'-0" / IN.
 USER NAME = gml1aume1p

ORIGINAL SURVEYED SURVEY PLOTTED
 SURVEY PLOTTED TEMPLATE
 NO. AREAS CHECKED

FINAL SURVEYED SURVEY PLOTTED
 SURVEY PLOTTED TEMPLATE
 NO. AREAS CHECKED

BY _____ DATE _____

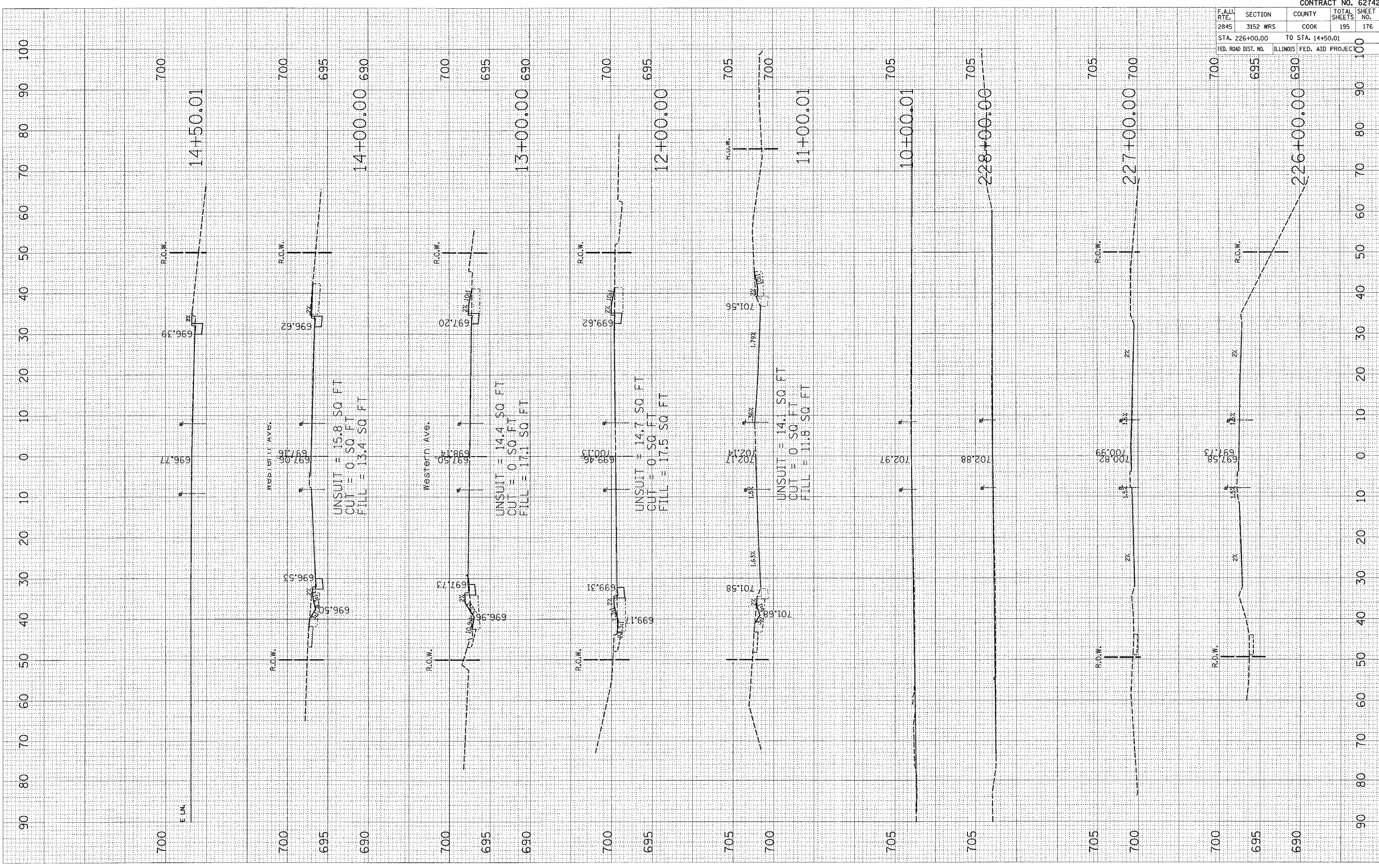


CONTRACT NO. 62742				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	175
STA. 219+00.00 TO STA. 225+00.00				
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

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 USER NAME = guillamefp

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 NO. SURVEY PLOTTED DATE AREAS CHECKED

FINAL SURVEYED SURVEY PLOTTED
 NO. SURVEY PLOTTED DATE AREAS CHECKED

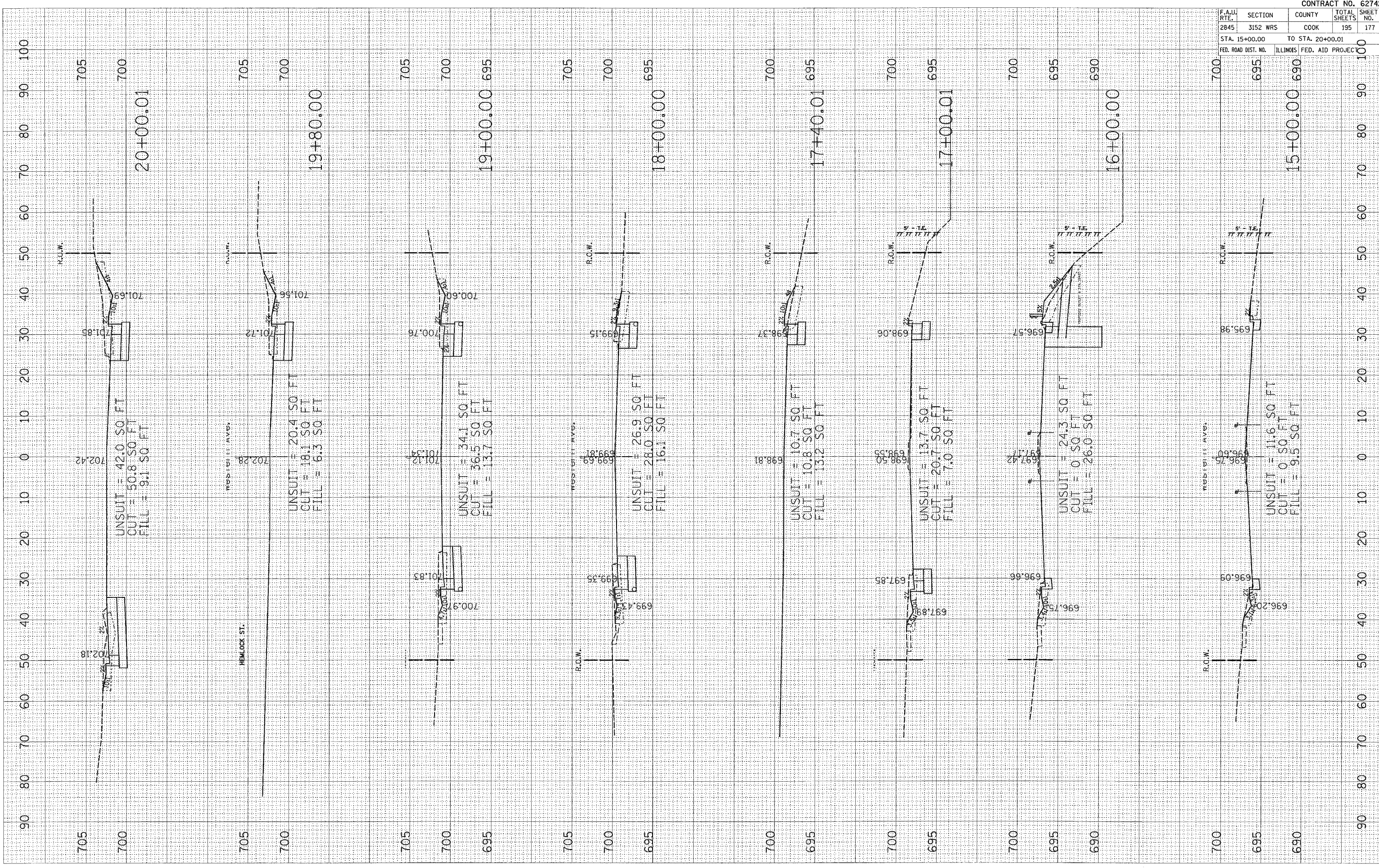


CONTRACT NO. 62742				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	176
STA. 226+00.00 TO STA. 14+50.01				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8" = 20' / IN.
 USER NAME = gulliammfp

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED
 NOTE BOOK DATE
 AREAS CHECKED

FINAL SURVEYED BY DATE
 SURVEY PLOTTED
 NOTE BOOK DATE
 AREAS CHECKED



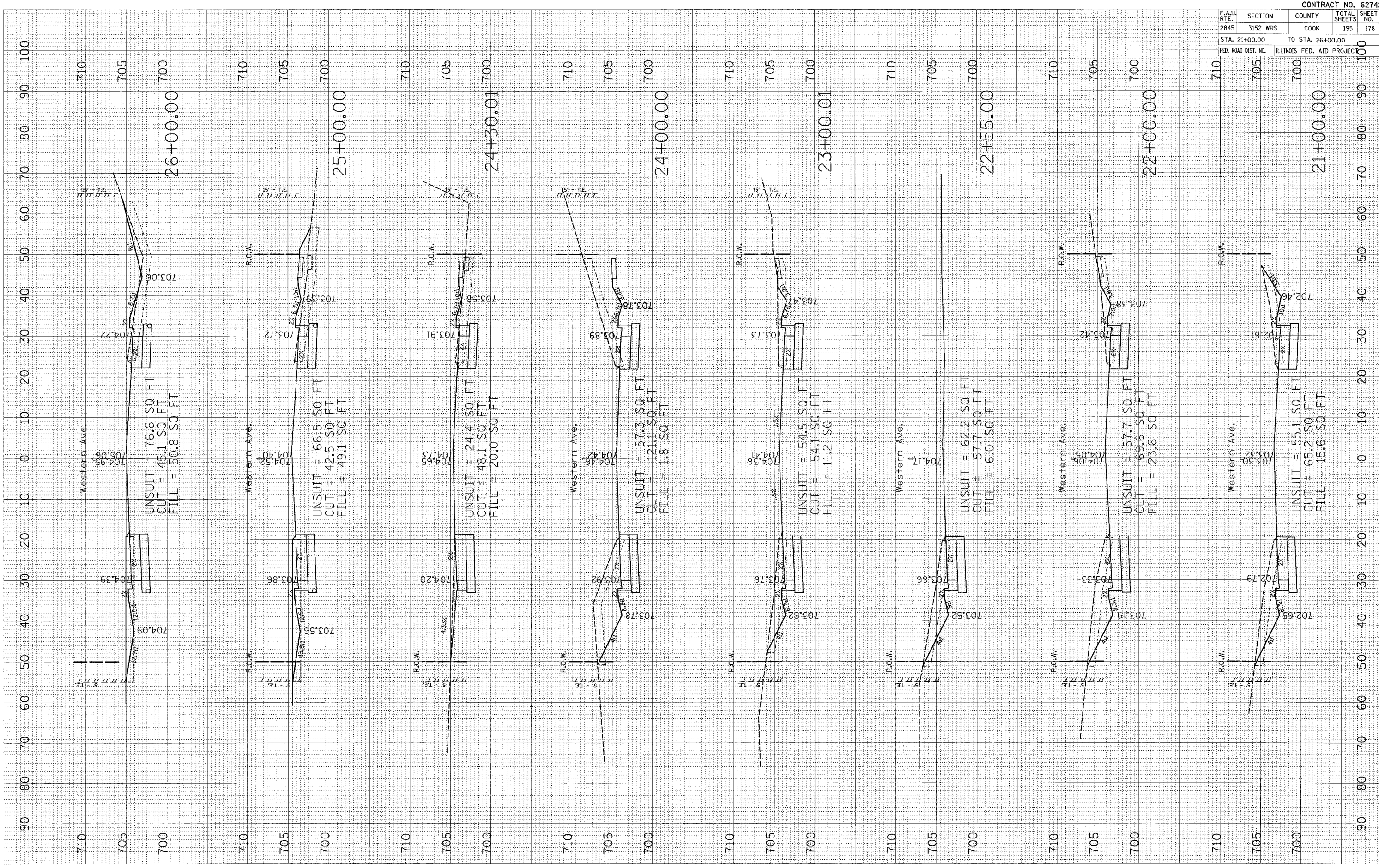
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	177
STA. 15+00.00		TO STA. 20+00.01		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJEC		100

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8" = 20.000' / IN.
 USER NAME = gmltamaefp

ORIGINAL SURVEYED SURVEY PLOTTED SURVEY
 NO. _____ DATE _____
 TEMPLATE _____
 AREAS CHECKED _____

FINAL SURVEYED SURVEY PLOTTED SURVEY
 NO. _____ DATE _____
 TEMPLATE _____
 AREAS CHECKED _____



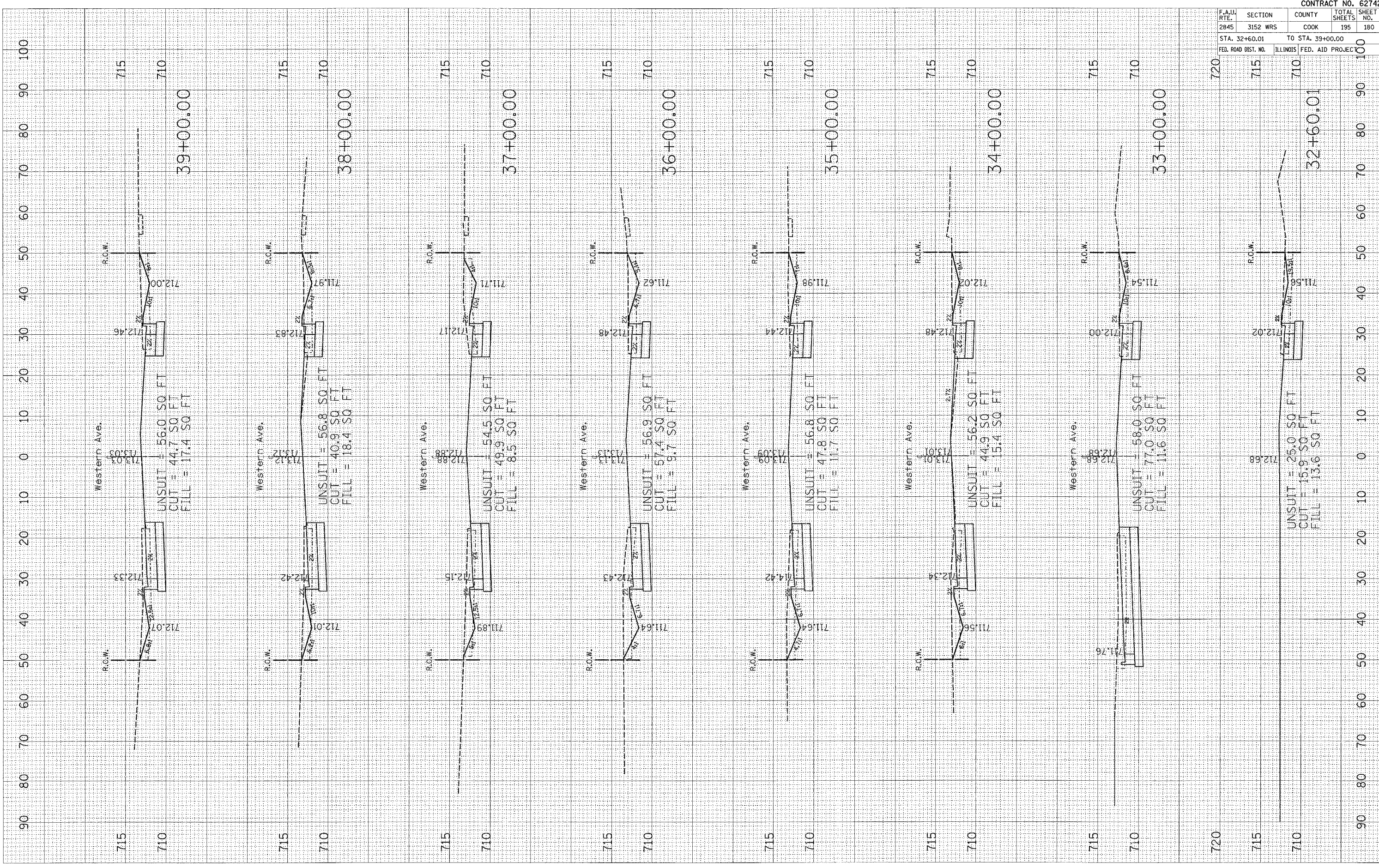
CONTRACT NO. 62742			
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS
2845	3152 WRS	COOK	195
STA. 21+00.00		TO STA. 26+00.00	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
710	705	700	100

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100

PLOT DATE = 7/7/2007
 FILE NAME = c:\p2\146599\western2\shdwr\book
 PLOT SCALE = 18.0000 / 1" = 100'
 USER NAME = guillamefp

ORIGINAL SURVEY NO. _____
 SURVEY PLOTTED DATE _____
 NO. _____

FINAL SURVEY NO. _____
 SURVEY PLOTTED DATE _____
 NO. _____



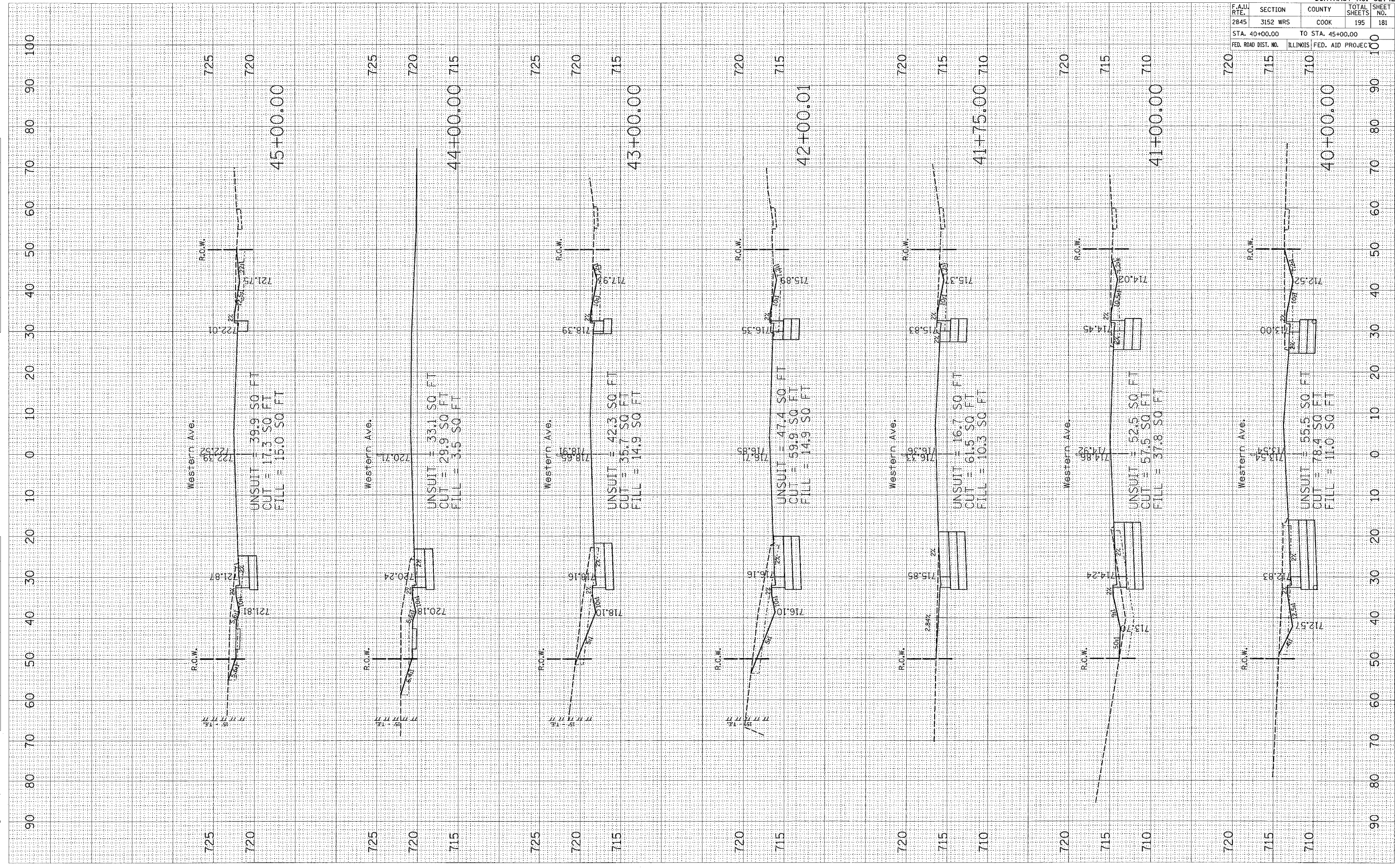
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	180
STA. 32+60.01		TO STA. 39+00.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		100

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 FILE NAME = c:\p0\proj\2\14145\1\western2.dwg
 PLOT SCALE = 1/8" = 1' IN.
 USER NAME = gullonefep

ORIGINAL SURVEY BY DATE
 SURVEYED _____ BY _____ DATE _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS _____
 AREAS CHECKED _____

FINAL SURVEY BY DATE
 SURVEYED _____ BY _____ DATE _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS _____
 AREAS CHECKED _____



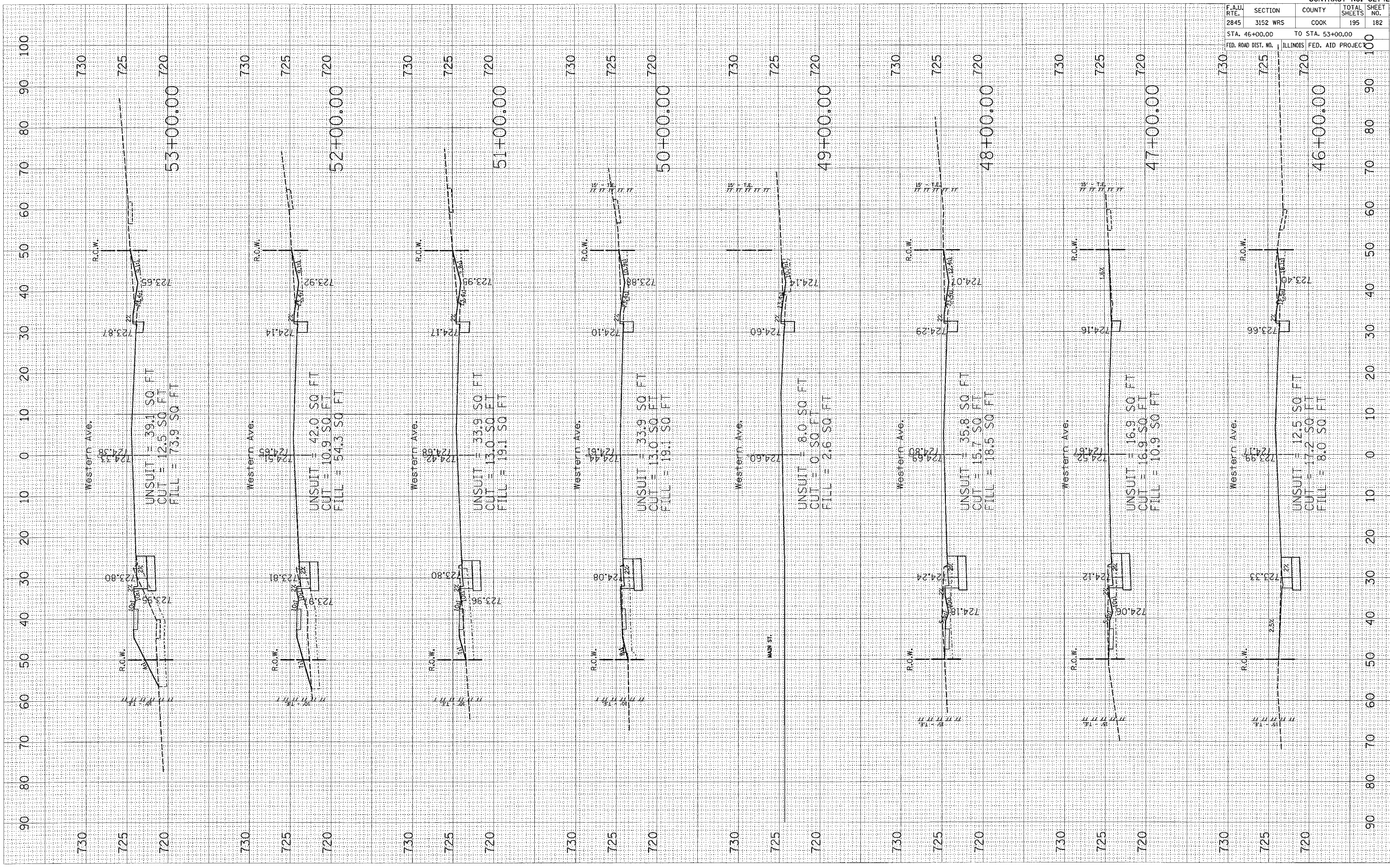
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	181
STA. 40+00.00		TO STA. 45+00.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJEC		100

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 FILE NAME = c:\p0\sets\p144659\vs_western2.dwg
 PLOT SCALE = 1/8"=1'-0"
 USER NAME = gulltaumfp

ORIGINAL SURVEY BY DATE
 SURVEYED SURVEY BY DATE
 TEMPLATE NO.
 AREAS CHECKED

FINAL SURVEY BY DATE
 SURVEYED SURVEY BY DATE
 TEMPLATE NO.
 AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	182

CONTRACT NO. 62742

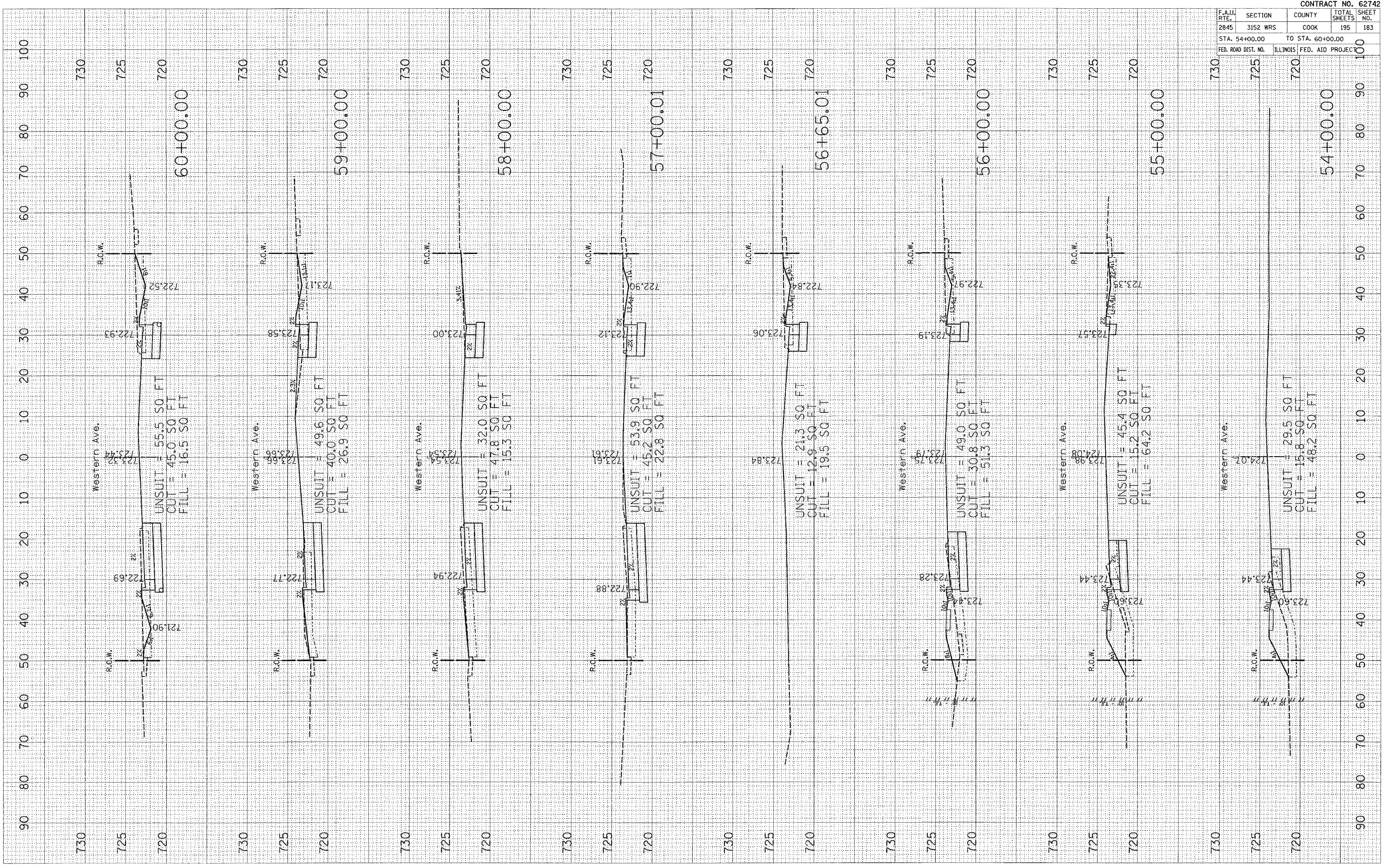
STA. 46+00.00 TO STA. 53+00.00

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

PLOT DATE = 7/2/2007
 PLOT NAME = \\s14699\western2\mwp\pbook
 PLOT SCALE = 10.0000 / IN.
 USER NAME = guillamefp

ORIGINAL SURVEYED _____
 SURVEY PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

FINAL SURVEYED _____
 SURVEY PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



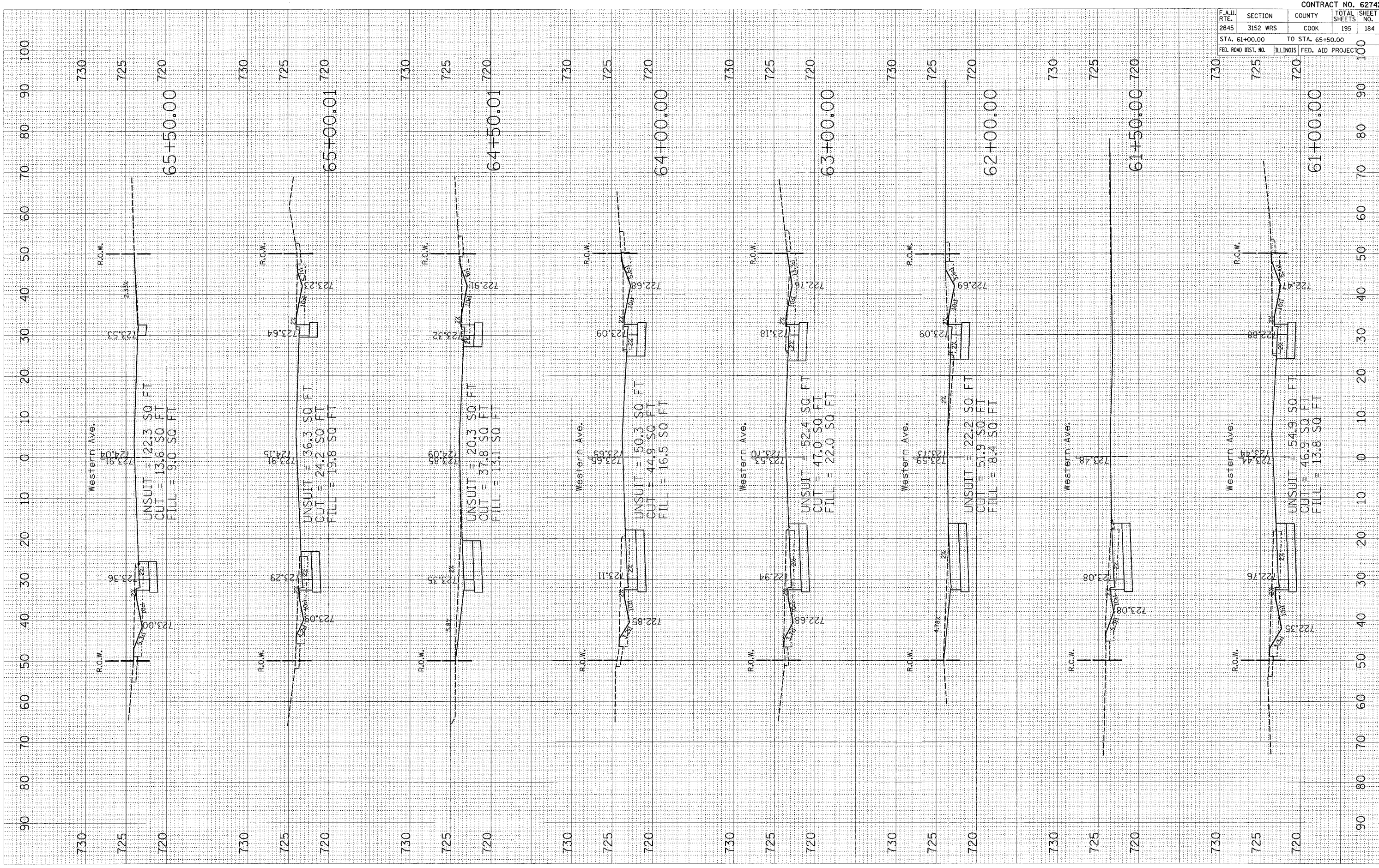
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	183
STA. 54+00.00		TO STA. 60+00.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8" = 20.000' / IN.
 USER NAME = guillaumefp

ORIGINAL SURVEYED PLOTTED
 SURVEY SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

BY DATE
 SURVEYED PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	184

STA. 61+00.00 TO STA. 65+50.00
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

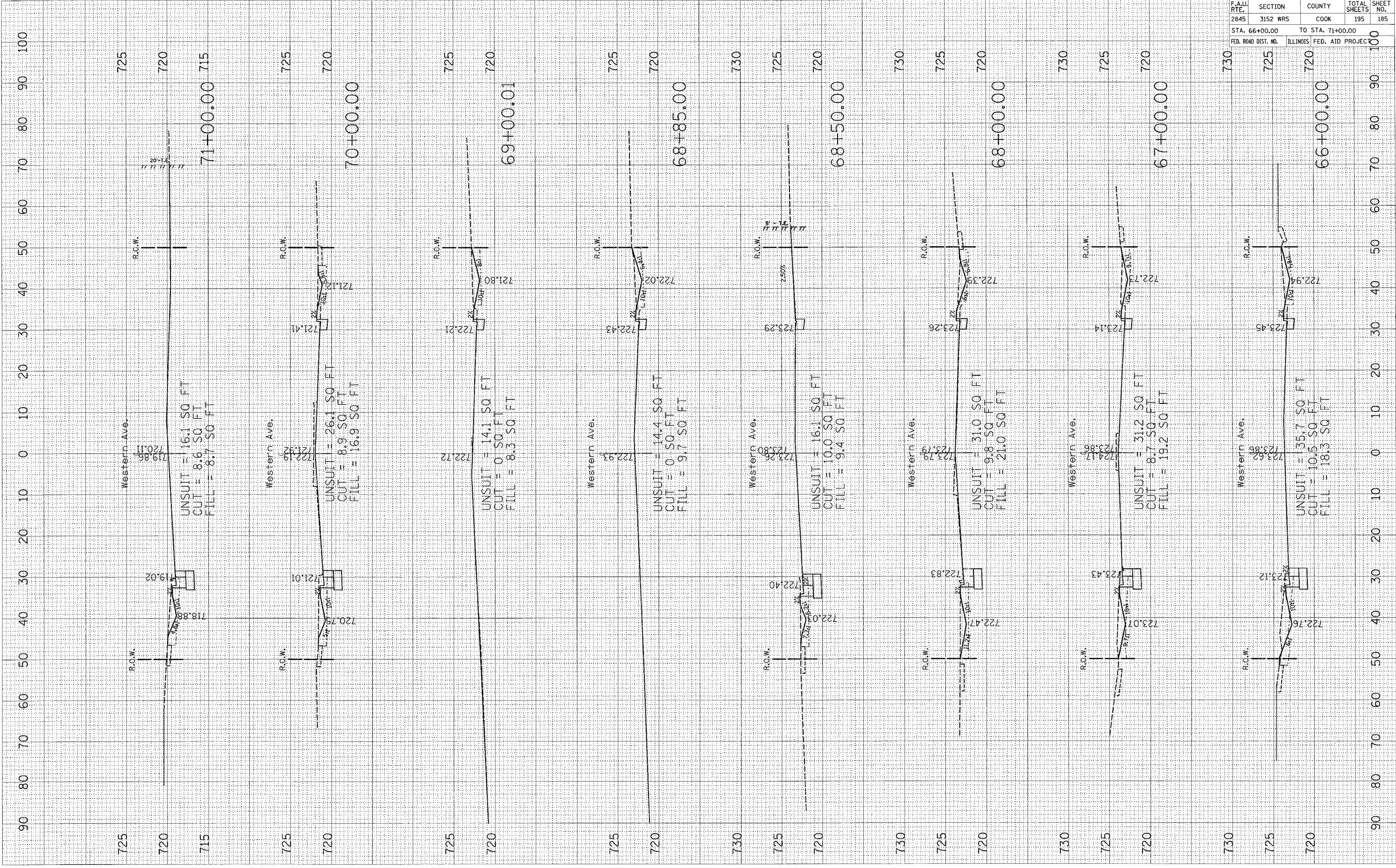
CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 FILE NAME = c:\pva\pva\144659\vs-western2\pva2\pva2.dwg
 USER NAME = gullmanefp

ORIGINAL SURVEY PLOTTED
 SURVEY PLOTTED
 TEMPLATE
 AREAS CHECKED

FINAL SURVEY PLOTTED
 SURVEY PLOTTED
 TEMPLATE
 AREAS CHECKED

BY: _____
 DATE: _____



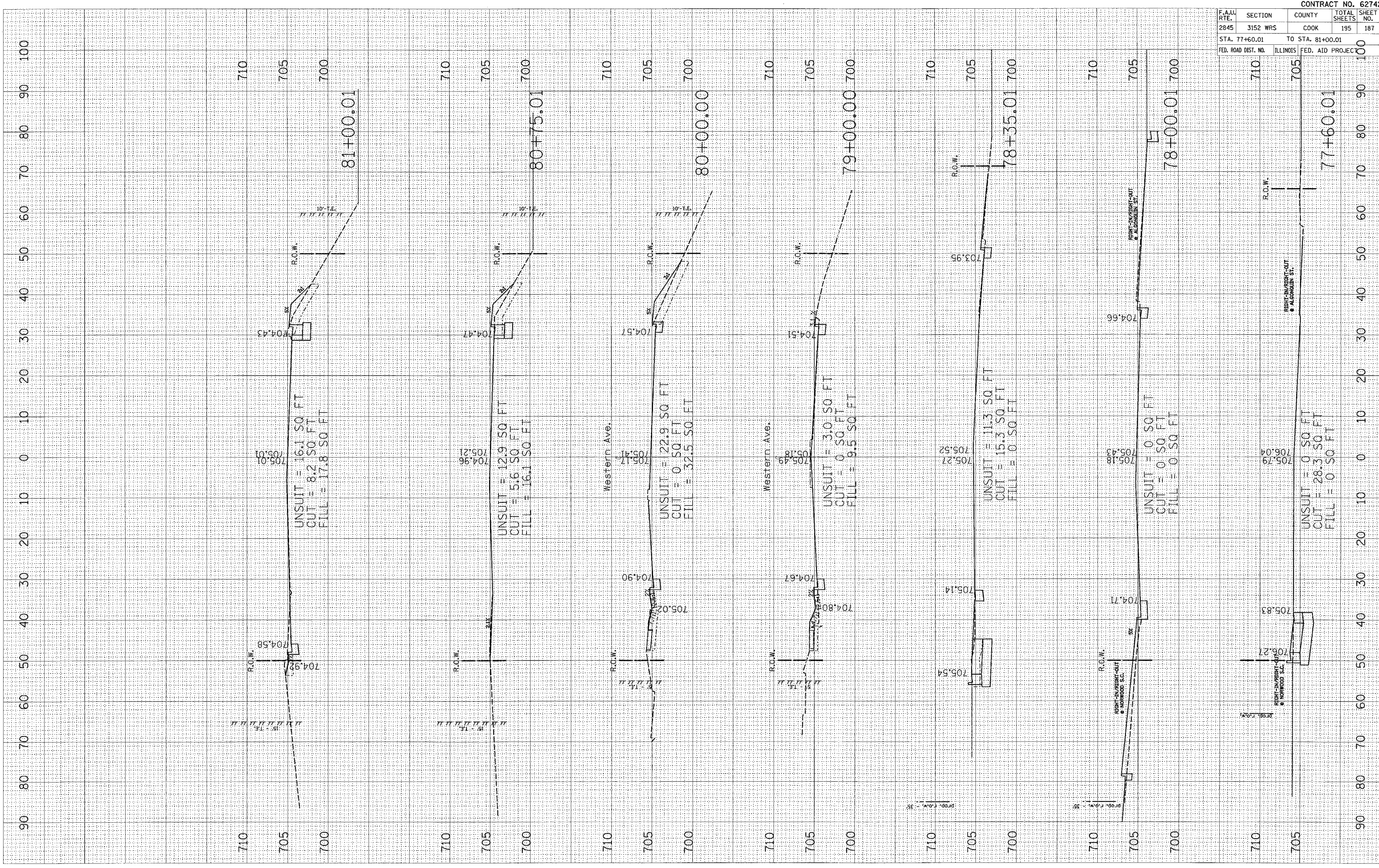
F.A.L.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	185
STA. 66+00.00		TO STA. 71+00.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		100

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT TIME = 11:41:46 AM
 PLOT SCALE = 10.0000 / IN.
 USER NAME = guillamefp

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED
 NOTE BOOK NO.
 AREAS CHECKED

FINAL SURVEYED BY DATE
 SURVEY PLOTTED
 NOTE BOOK NO.
 AREAS CHECKED



F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	187
STA. 77+60.01		TO STA. 81+00.01		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

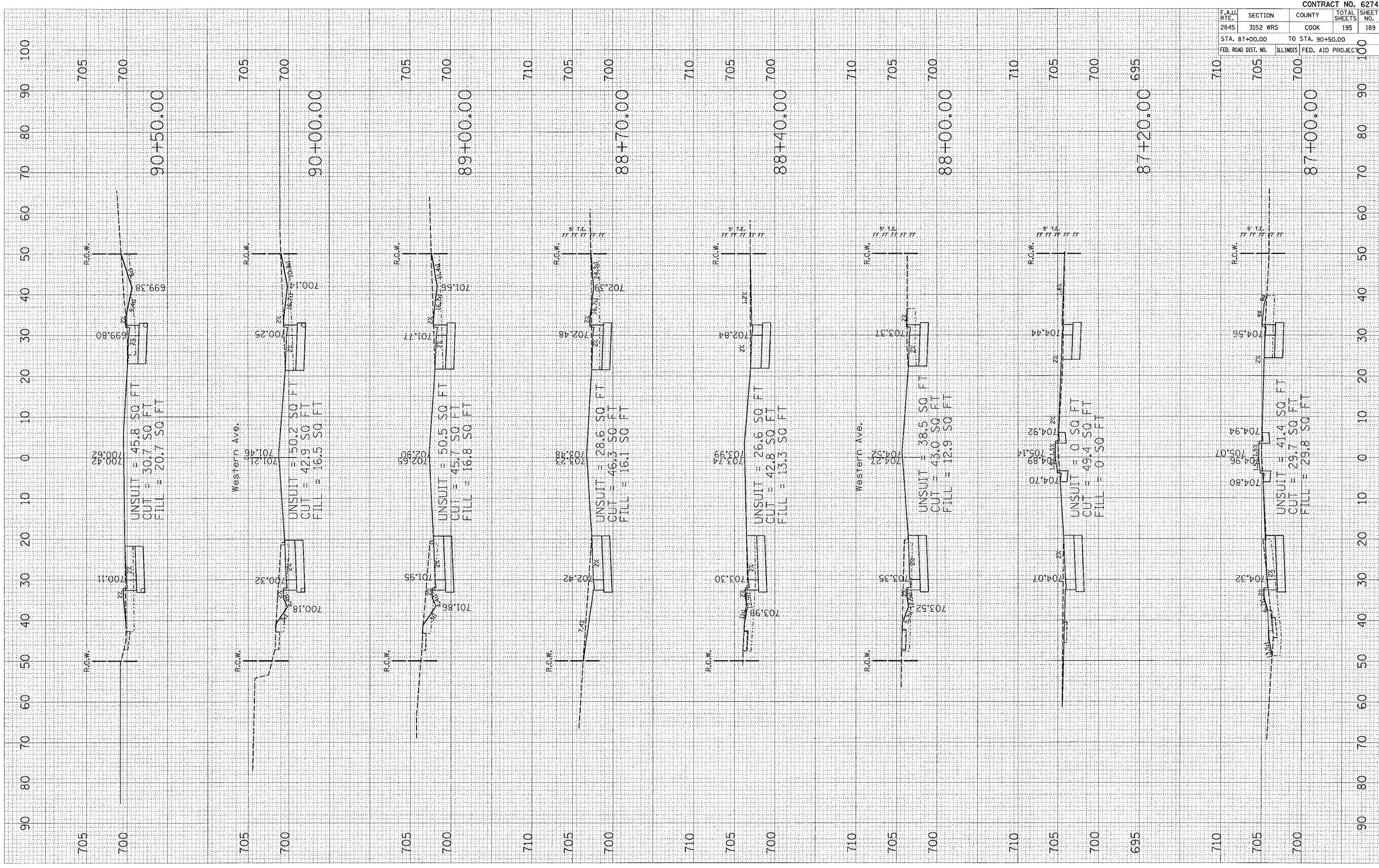
CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/4" = 100'
 USER NAME = gulltaunefp

ORIGINAL SURVEY PLOTTED TEMPLATE NO.
 SURVEYED PLOTTED TEMPLATE AREAS CHECKED

FINAL SURVEY PLOTTED TEMPLATE NO.
 SURVEYED PLOTTED TEMPLATE AREAS CHECKED

BY: _____ DATE: _____



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	189

CONTRACT NO. 62742

STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
87+00.00	90+50.00		

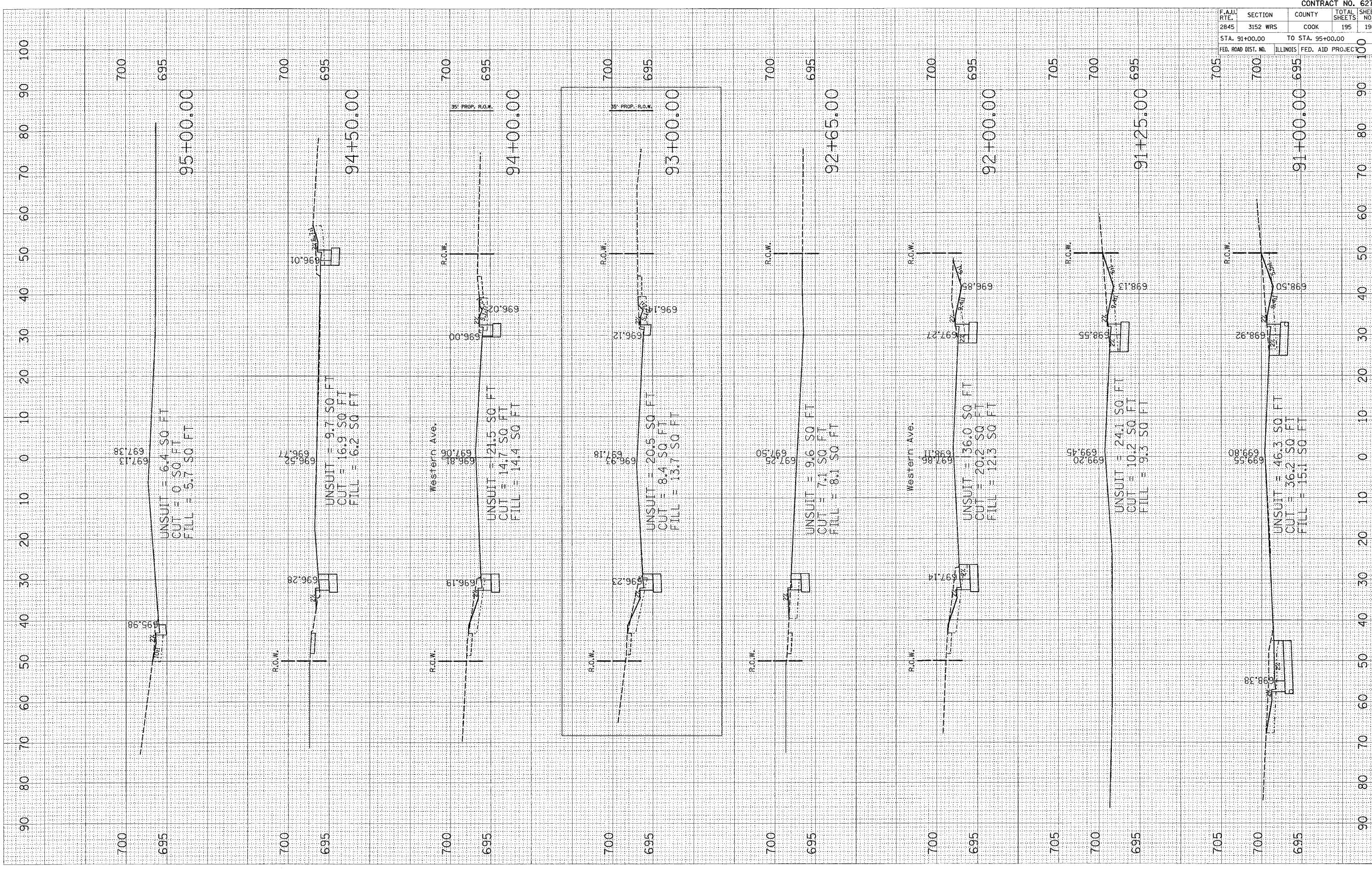
PLOT DATE = 7/2/2007
 PLOT SCALE = 1/4" = 100'
 USER NAME = guillaumefp

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

FILM SURVEY PLOTTED NOTE BOOK AREAS CHECKED

BY DATE

BY DATE



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	190
STA. 91+00.00		TO STA. 95+00.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		100

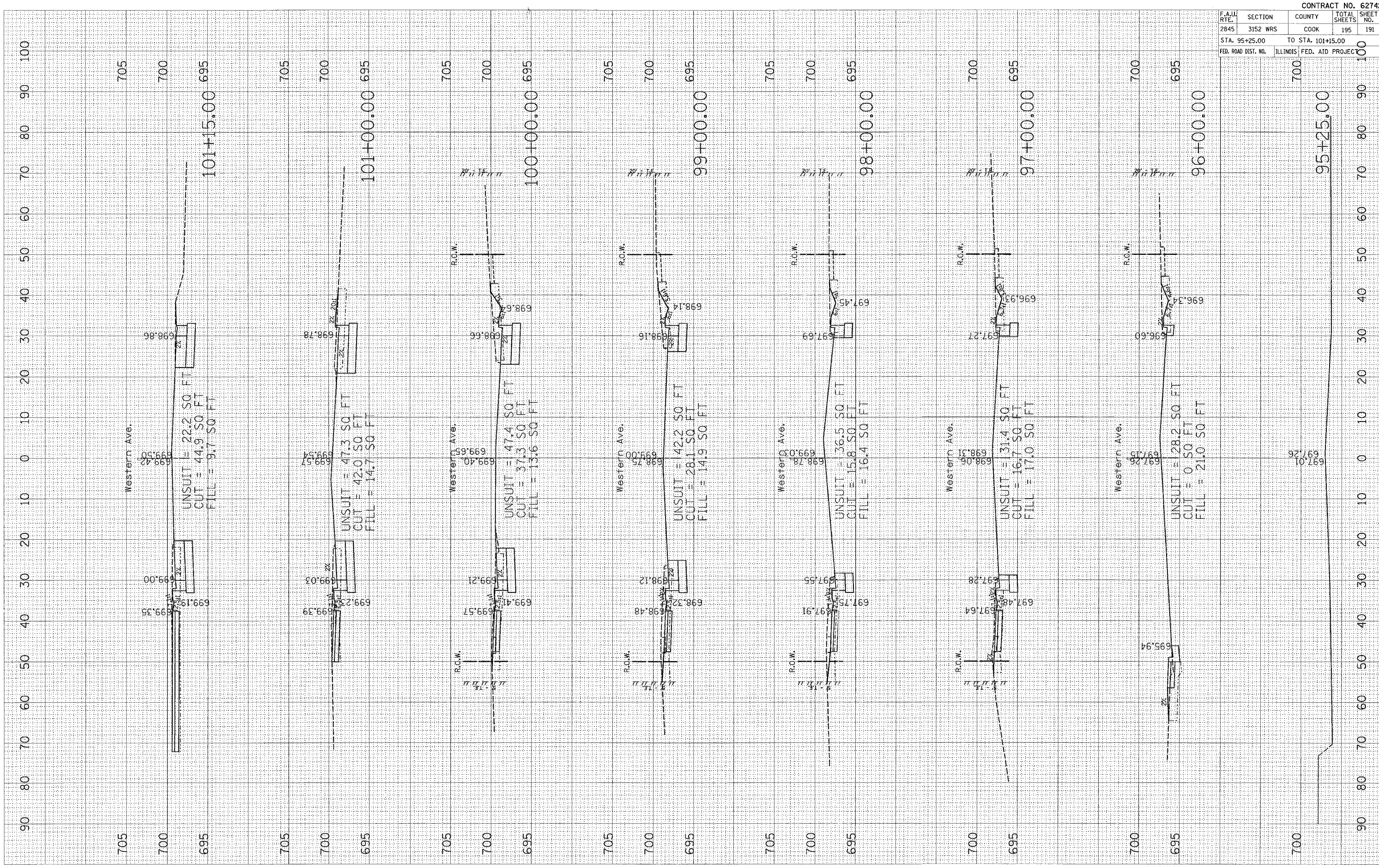
CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8" = 20.000' / 1" IN.
 USER NAME = gullt@uic.edu

ORIGINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED TEMPLATE
 PLOTTED BOOK AREAS CHECKED
 NO.

FINAL SURVEYED
 SURVEY PLOTTED
 PLOTTED TEMPLATE
 PLOTTED BOOK AREAS CHECKED
 NO.

BY: _____ DATE: _____



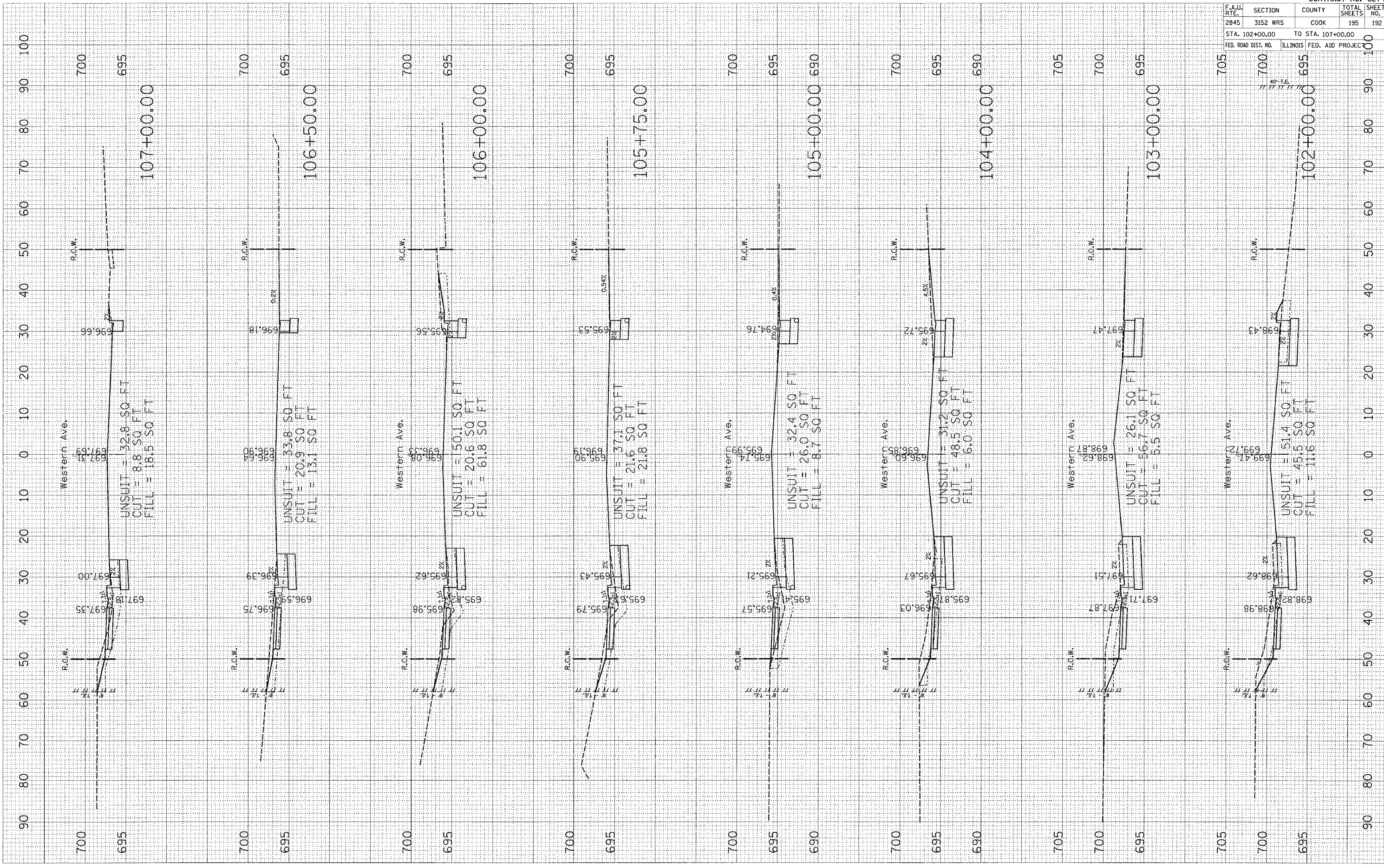
CONTRACT NO. 62742				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	191
STA. 95+25.00 TO STA. 101+15.00				
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

PLOT DATE = 7/2/2007
 FILE NAME = c:\prowork\146591\western2.dwg
 USER NAME = gullonearP

ORIGINAL SURVEY PLOTTED
 SURVEY TEMPLATE AREAS CHECKED

FINAL SURVEY PLOTTED
 SURVEY TEMPLATE AREAS CHECKED

BY: _____ DATE: _____



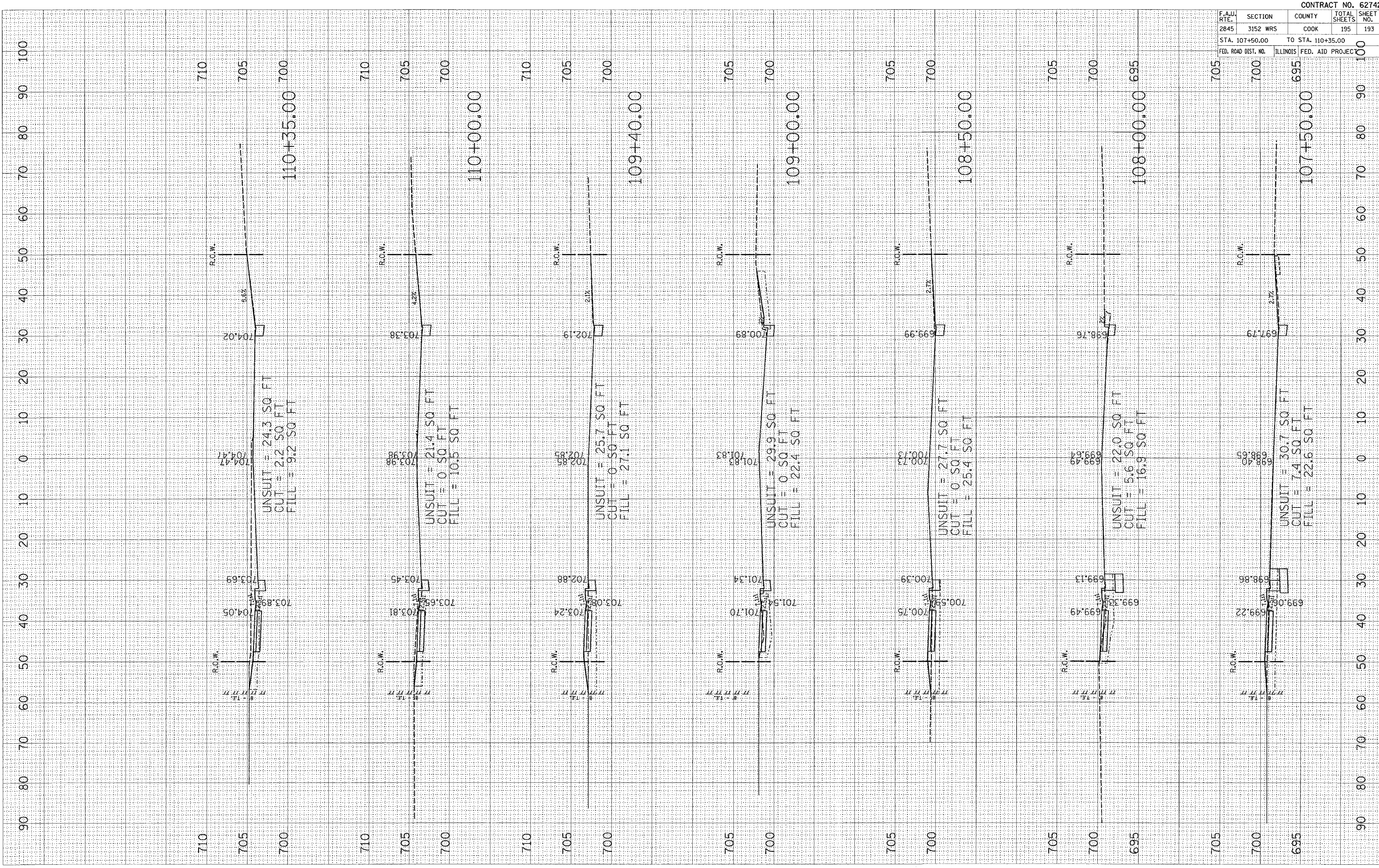
F.A.U. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845		3152 WRS	COOK	195	192
STA. 102+00.00 TO STA. 107+00.00					
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT NAME = 108000 / IN.
 PLOT SCALE = 1/8" = 100'
 USER NAME = guillaumejp

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED BY DATE
 NOTE BOOK NO. AREAS CHECKED

FINAL SURVEYED BY DATE
 SURVEY PLOTTED BY DATE
 NOTE BOOK NO. AREAS CHECKED



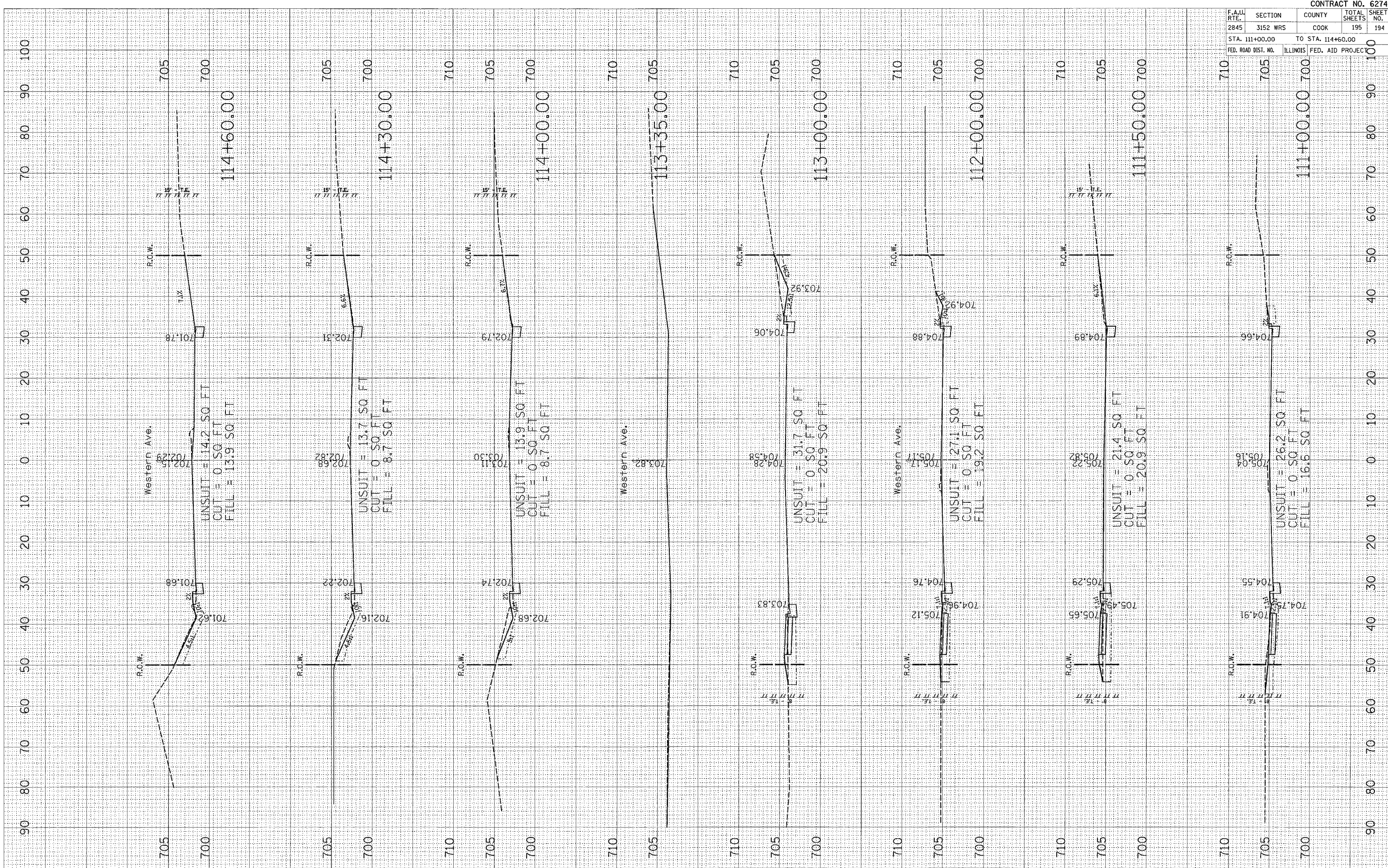
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	193
STA. 107+50.00		TO STA. 110+35.00		100
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		100

CONTRACT NO. 62742

PLOT DATE = 7/2/2007
 PLOT SCALE = 1/8"=20.00'
 USER NAME = guillaumefp

ORIGINAL SURVEY PLOTTED
 SURVEY PLOTTED
 TEMPLATE PLOTTED
 NO. AREAS CHECKED

FINAL SURVEY PLOTTED
 SURVEY PLOTTED
 TEMPLATE PLOTTED
 NO. AREAS CHECKED



CONTRACT NO. 62742				
F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2845	3152 WRS	COOK	195	194
STA. 111+00.00 TO STA. 114+60.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

